General Knowledge Among the People: Rural Strategy Development at the College Board

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Rural Strategy Development at the College Board

Doctor of Education Leadership (Ed.L.D.)

Capstone

Submitted by

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"It is not the critic who counts; not the man who points out how the strong man stumbles, or where the doer of deeds could have done them better.

The credit belongs to the man who is actually in the arena; whose face is marred by dust and sweat and blood; who strives valiantly; who errs, who comes short again and again, because there is no effort without error and shortcoming; but who does actually strive to do the deeds; who knows great enthusiasms, the great devotions; who spends himself in a worthy cause; who at the best knows in the end the triumph of high achievement, and who at the worst, if he fails, at least fails while daring greatly, so that his place shall never be with those cold and timid souls who neither know victory nor defeat."

—Theodore Roosevelt, Sarbonne, France, 1910;
(Roosevelt & Thomsen, 2003)

This capstone concludes an experience granted to me through the hard work, determination, support, and love of many. I entered this arena thanks to them.

To my cohort and Ed.L.D. colleagues, thank you. You gave me your perspectives, knowledge, and passion each day for the last three years. From Cambridge to Tokyo and San Diego to Mount Washington, I complete this journey only by following your footprints.

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Abstract

10 million students walk into rural schools every school day, representing about 20% of the United States' public school population. More than a third of all public schools and almost three-fifths of local education agencies serve rural students. Creating coherent, scalable strategies to impact rural students can be difficult given the diffuse and often isolated context of the nation's 7,000+ rural districts.

I completed my residency at the College Board, a New York-based nonprofit organization best known for its SAT, PSAT/NMSQT, and Advanced Placement assessments. In 2015, these exams reached 1.7 million, 3.8 million, and 2.5 million students, respectively. Participation in College Board assessments continues to grow over time, but rural students participate at rates lower than their peers.

Working in Washington, DC, I completed a strategic project in the College Board's Global Policy, Advocacy, and Communications division. The goals of the project were to determine the potential value of a strategy focused on rural schools and to develop a proposal outlining how to enact such a strategy. Through my strategic project, I created a College Board rural database, conducted interviews and case studies, and developed strategy proposals for potential pilot work in rural schools and districts.

In this capstone, I describe the actions and results of the strategic project in three phases and analyze the results through an analytic framework called the "strategic triangle." This tool allows a decision maker to understand the three issues in nonprofit strategy: the potential public value, the sources of legitimacy and support, and the operational capabilities of the implicated organization.

The work of my residency resulted in the authorization of time, resources, and human capital needed to launch a College Board Rural Strategy pilot in the states of Colorado and Idaho. This pilot intends to create new partnerships and opportunity pipelines in rural schools while increasing the value of College Board-provided assessments and supports for rural students.

Introduction

Between June 2015 and January 2016, I developed and executed a strategic project at the College Board's Washington, DC office. My strategic project was designed as a set of investigations resulting in a strategy document that would provide the Executive Leadership Team (ELT) of the organization with recommendations about how to use their products and services to impact America's rural schools. Essentially, I was tasked with creating an updated College Board rural strategy with a specific focus on the role of Advanced Placement in rural education.

This introduction covers the history of the College Board and the current context that created an opportunity for my strategic project. This includes the creation of the College Board in the early 20th century, the SAT's introduction in the mid-20th century, and the development of Advanced Placement exams in the 1960s. Next, I introduce a set of topics that provide the context for my strategic project including my background, national political discussion about school curricula, and the potential untapped market of small, rural schools. This section includes data describing the current market penetration of two key College Board products, AP and PSAT.

After discussing the strategic project's context, I preview the next section of my capstone, the Review of Knowledge for Action (RKA). Here I describe the framework I chose to analyze the strategic project, referenced throughout the

capstone as the "strategic triangle." I then provide background on the College Board's organization chart in order to help the reader understand the location of the strategic project within the larger organization. Finally, I illustrate the potential implications of this strategic project using the description an individual school district in mountainous Central Idaho.

History of the College Board

Increasing the rigor of high school curricula in classrooms across the United States has been an area of policy interest for decades, as more and more students attended and graduated from high school throughout the 20th century (Cohen & Spillane, 1992; Jerald, 2008; Smith & O'Day, 1990). Phases of reform range from the first Elementary and Secondary Education Act (ESEA) in 1965, to the *A Nation at Risk* report in 1983, to subsequent state standards movements including Common Core State Standards, to the latest ESEA reauthorization, the Every Student Succeeds Act, signed by President Obama in December 2015. Policymakers, educators, and communities have long discussed and debated how best to use grades 9-12 to prepare each generation for continuing education and career after graduation from high school.

Founded in December 1899 to connect high schools, institutions of higher education, and their faculty, the College Entrance Examination Board continues as a strong presence in the education sector, particularly when it comes to assessment and curriculum choices in high school and college admissions. Millions of students interact each year with the College Board's best-known

services: the SAT, PSAT/NMSQT, and Advanced Placement program. Additionally, the vast majority of American colleges and universities look at least in part to College Board assessments and programs when making enrollment and course management (College Board, 2015; Powell, 1993).

The College Board maintains a membership of over 6,000 high schools, two- and four-year colleges, universities, secondary school districts, nonprofits, higher education systems, and government agencies found in every state and territory of the United States and around the world (College Board, 2015). The organization must be responsive to the needs, concerns, and opportunities presented by its membership. Apart from annual fees of $325 paid by member organizations, the College Board draws on income from federal, state, and district-level education funding as well as fees collected from the administration of examinations—particularly PSAT/NMSQT, SAT, and AP exams. Over the course of its history, the College Board has expanded the number of services and programs in order to meet the growing demand for student assessment and normed, validated measures of course completion. Particularly since David Coleman's arrival as CEO in 2012, the organization has undergone a refocus, attempting to move from an organization focused on assessment delivery to one determined to present a range of opportunities to learners throughout their secondary education. Coleman sums it up this way, "Assessment without opportunity is dead," (Riddell, 2015).

Growth of Advanced Placement. Throughout the early 20th century, the College Board published curricula documents known as *Definition of the Requirements*. The annual publications set out the criteria for what students should be able to know and do in order to be admitted to institutions of higher education, and were heavily influenced by a few elite institutions such as Yale, Princeton, and Harvard for much of the period between 1910-1940 (Powell, 1993). While meeting on Sunday, December 7, 1941, the admissions directors at the three aforementioned institutions—known as the "Three Musketeers"—along with College Board executive secretary George Mullins, made a decision which greatly altered the future of the organization. They determined that the traditional three-hour essay examinations given each June—the "College Boards"—should be abandoned in favor of April tests, including the Scholastic Aptitude Test, which had been launched four years earlier.

Upon hearing about Japan's attack on Pearl Harbor that day the group presented the war effort as the climactic inflection point for moving to the April set of examinations (Fuess, 1950). The department of defense hoped to use the SAT to sort members of the military into various roles based on their respective test scores, thus creating a more efficient fighting force with men in roles best suited to their abilities. As the SAT became the dominant examination for military and college entrance, the College Board would soon see demand for content-specific assessments similar to the College Boards of years past.

In 1956, the Ford Foundation brought together the private high schools Andover, Exeter, and Lawrenceville with the admissions teams at the same universities who had pushed the College Board to the SAT, namely, Harvard, Princeton, and Yale. This group met in an attempt to find connections between high school and college course content (Nugent & Karnes, 2002). The results of that Ford study brought forth the current iteration of Advanced Placement. AP has grown from an original offering of eleven subjects to thirty-seven courses as of 2015 (College Board, 2001, 2015). The number of exams administered exceeded one million for the first time in 1998 (Nugent & Karnes, 2002), and the program has seen substantial growth over the last two decades. The number of students taking an exam grew from just over a half million in 1995 to over two million in 2012 (Broad Foundation, 2013) and numerous reports have been issued detailing this growth. This growth has been particularly strong in suburban and urban school districts around the country and has been enhanced through incentives such as the U.S. Department of Education's Advanced Placement Incentive Program (Duffett & Farkas, 2009).

Rural Strategy as a Strategic Project

A confluence of three factors created the opportunity to explore interactions between rural schools and the College Board: 1) My biography presented an opportunity to speak about and hold legitimacy within rural communities; 2) Continuing negative political fallout from the Common Core State Standards movement and the Advanced Placement program's role in

providing curricular frameworks, particularly in states with large rural populations, required increased stakeholder engagement with rural educators; and 3) Current executives at the College Board wanted to understand the market potential available in mostly untapped rural markets. The organization has investigated ways to reach rural communities in the past, but mostly on a small scale and in fits and starts. A ten-month dedicated residency provided needed space to investigate a rural strategy with both depth and breadth.

Personal background. First, my educational experience and upbringing made rural strategy development an appropriate strategic project. I grew up in the rural ranching town of Council, a community of just over 800 on the edge of the Rocky Mountains in Central Idaho. For much of my childhood, we lived across the street from the two schools that made up the entire district. My stepfather served as my elementary principal and my mother taught music to my classmates and me for six years.

In 2004, I graduated with 34 other "Lumberjacks" from Council High School—a school that has never offered AP courses. I was the only SAT exam-taker the year I graduated, and one of few in my counselor's memory, as most students took the ACT. A decade later, in August 2014, I met with Stefanie Sanford, the College Board's Chief of Global Policy, Advocacy, and Communications at the organization's Washington, DC office. Without knowing my entire story, she immediately recognized the potential value that someone

educated in rural America could bring to a project designed to increase connection between rural schools and the College Board.

Political implications. Current events in American politics provide the second reason for this strategic project. Following President Obama's election in 2008, conservative governors and state legislatures took control of many statehouses in the midst of an economic recession. Appropriations for education dropped significantly in many states in order to balance shrinking budgets. As the economy slowly recovers, education funding at the state level has similarly lagged as conservative majorities attempt to hold costs down. Due to increased competition for fewer resources, the College Board and its services need to be seen as relevant priorities at the state level if the organization hopes to see state appropriators and education agencies direct funds toward AP coursework and college entrance exam costs.

Historically, the organization has had a strong presence along the country's east and west coasts and has seen success in securing statewide and district-level funding in populous coastal states such as California, New Jersey, and Florida, particularly in urban areas. States in the middle of the country have had a stronger association with the ACT and dual enrollment courses than the College Board's SAT and AP courses. Additionally, states with higher rural populations by percentage, many located away from the Atlantic and Pacific coasts, have increasingly voted for the Republican party in recent election cycles (Gelman, 2010) which could lead to slimmer fiscal budgets.

Put simply, the College Board has had greater success in growing its impact in suburban and urban areas. Given this success, the organization now seeks to better understand how it can engage rural communities and school districts as well as red state legislatures and education agencies to extend success to another group of students. The political controversy stemming from the College Board's recent revision to its AP U.S. History (APUSH) course shows a more acute case study of how conservative politicians and educators seem to see a disconnect between their educational priorities and the curricular frameworks developed by the AP program—and perhaps the College Board more broadly. In states including Oklahoma, Texas, Nebraska, North Carolina, and Tennessee, educators and legislators indicted the organization for being anti-American or liberal (Turner, 2015). A subsequent set of revisions incorporating feedback from a large number of conservative historians and educators limited the reputational and legislative impact (Hess, 2015), but the rollout of AP U.S. History highlighted the need to more consistently engage both rural and conservative viewpoints.

Small rural schools as a product market. Finally, a strategic project to develop rural strategy could provide information to College Board leadership about rural education from a market and capacity perspective. Providing estimates for the size of the rural education market can be difficult due to variance in the precise definitions used. Disparities in the number of rural students many times stems from determining student counts at the school, district, or state level, and whether one uses rural definitions set by the federal

or state government (D. Geverdt, personal communication, September 3, 2015). In an attempt to provide consistency for policymakers and advocacy groups, the Rural School and Community Trust (RSCT) publishes a biennial report using data from the National Center for Education Statistics (NCES) and the Census Bureau. The document serves as a holding pen for rural education data and trends.

In the latest edition of this report from 2014, *Why Rural Matters,* the authors use NCES district-level data from the 2010-11 academic year to show students in rural school districts making up just over 20% of the total public school population at a total of 9.77 million (Johnson, Showalter, Klein, & Lester, 2014). Tabulating at the school level as opposed to the district level, NCES academic year data reports that 32% of all schools and 57% of all regular school districts operate in rural areas. NCES calculates the number of rural students to be 12 million, representing 24% of total enrollment (NCES, 2013). I discuss the variances resulting from district or school level data collection and the implications of these differences for the strategic project in the RKA to follow.

College Board products in small rural schools. Reports published this year by Nat Malkus at the American Enterprise Institute show that rural schools offer Advanced Placement courses at lower rates than their peers, with this disparity accelerating between 2008 and 2012 (Malkus, 2016). Looking at school size, Malkus' work also shows that, as of 2012, schools with fewer than 500 students offer AP coursework at a rate of just over 50%, whereas schools with 1,500 or more students offer AP coursework at a rate of 95%. Additionally, 65%

of schools coded as rural by NCES locale code offered AP courses in 2012, with urban schools offering AP at a rate of over 80% and suburban schools exceeding 90% (Malkus, 2016a). Overall, a student enrolled in a large, urban or suburban school will have greater access to AP courses on average than a peer enrolled at a small, rural school.

I worked with colleagues in the Policy division of the College Board to develop maps showing the AP and PSAT participation rates of every school district in the country. Overall, these maps show higher participation in AP and PSAT exams in suburban and urban districts. While initial questions from College Board leadership looked to understand how to increase the presence of AP in rural areas, the evidence shows that both the PSAT exam and AP courses have room to grow as rural solutions. Across all six maps, dark red circles blot the center of the country, indicating low program participation. In general, Midwestern states have a higher number of school districts covering a smaller land area on average than Western, Southern, and Eastern states. Nevada and many Southern states are characterized by a predominance of county-based school districts.

The first set of three maps show AP participation drawn from a data set collected by the College Board's Data Science division and NCES' Common Core of Data (CCD). The first map shows participation rates in every district. The second map shows the three largest local groups: urban, suburban, and town districts. Finally, the third map shows AP participation for rural school districts.

The darker the red of the circle, the lower the district's participation, with deep red circles showing AP participation rates lower than 10% of a districts' graduates. Greener circles show higher AP participation. The circle representing each district switches from red to green at 50% participation. Particularly in Figure 1B, the map showing AP participation in non-rural districts, note the pockets of green around major urban centers on the coasts and Arkansas, the state that requires all high schools to have at least four AP courses.

Figure 1A: AP Participation, All School Districts, 48 Contiguous States, AY14-15

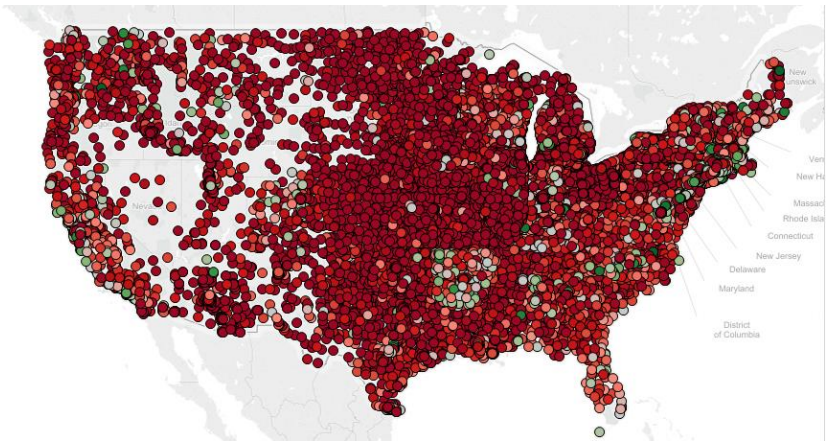


Figure 1B: AP Participation, Non-rural Districts, 48 Contiguous States, AY14-15

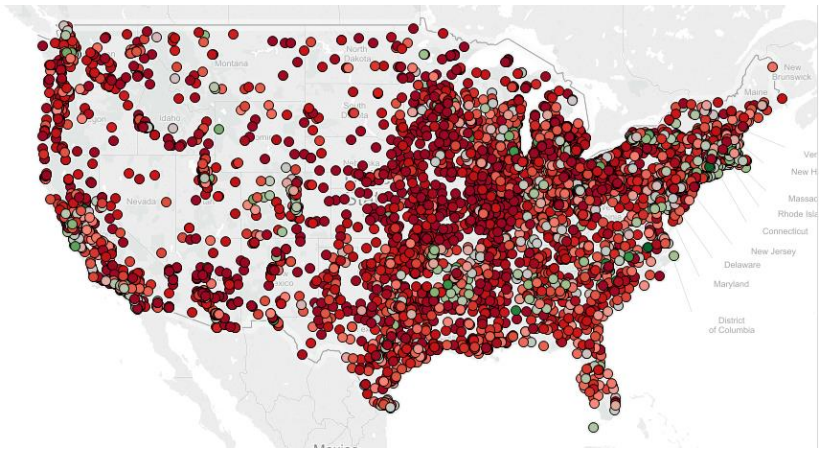
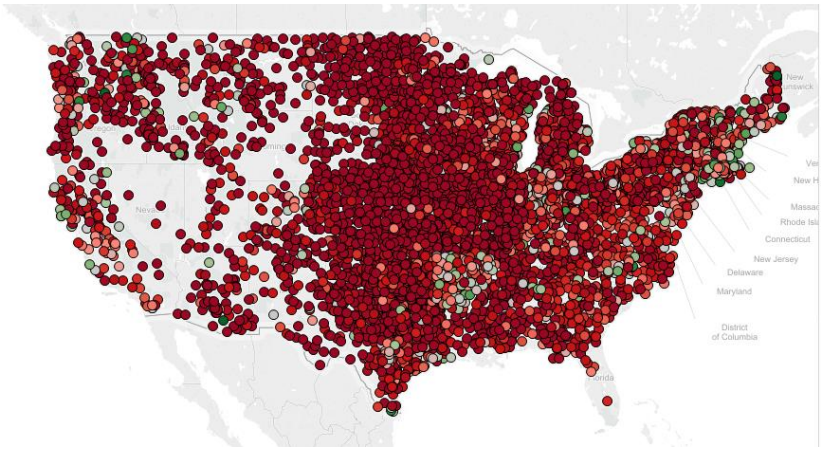


Figure 1C: AP Participation, Rural Districts, 48 Contiguous States, AY14-15



Source: National Center for Education Statistics Common Core of Data 2013-14 AY (Institute of Education Sciences, 2015a); College Board internal examination data, 2014-15 AY.

The second set of three maps show the same parameters for PSAT participation for all districts, non-rural districts, and rural districts. Particularly in Figures 2B and 2C, note the green areas along the coasts, the Northeast Corridor, the Pacific Northwest, and in the states of Texas, Indiana, and Georgia. Overall, the most obvious takeaway may be the large number of districts in bright red on both maps, which shows the opportunity for future growth. More rural districts participate in the PSAT than AP. This is shown by more district circles appearing on Figure 2C, the rural district PSAT participation map, than Figure 1C, the map showing rural district AP participation above.

Additionally, these maps show the vast number of rural districts. In total they outnumber all non-rural districts and are highly concentrated in the Midwest, South, and Northeast. Finally, the maps of rural districts overall reflect lower participation, as they show less green than the maps showing non-rural districts.

Figure 2A: PSAT Participation, All Districts, 48 Contiguous States, AY14-15

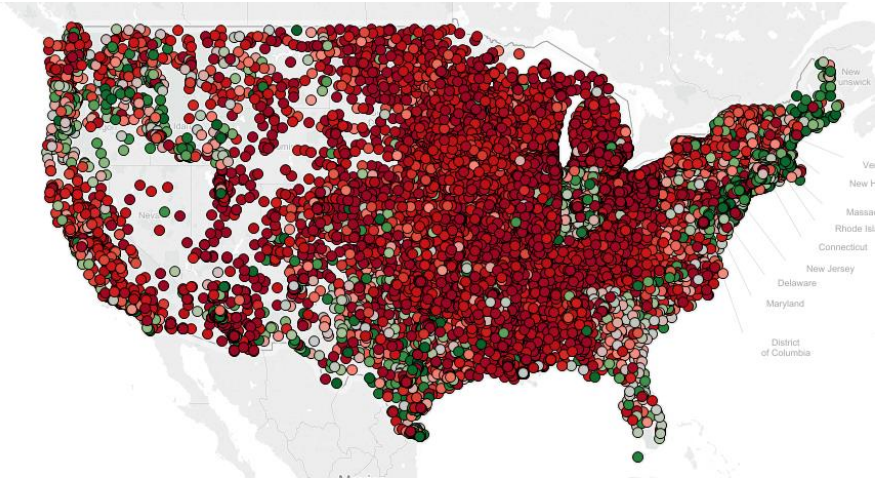


Figure 2B: PSAT Participation, Non-rural Districts, 48 Contiguous States, AY14-15

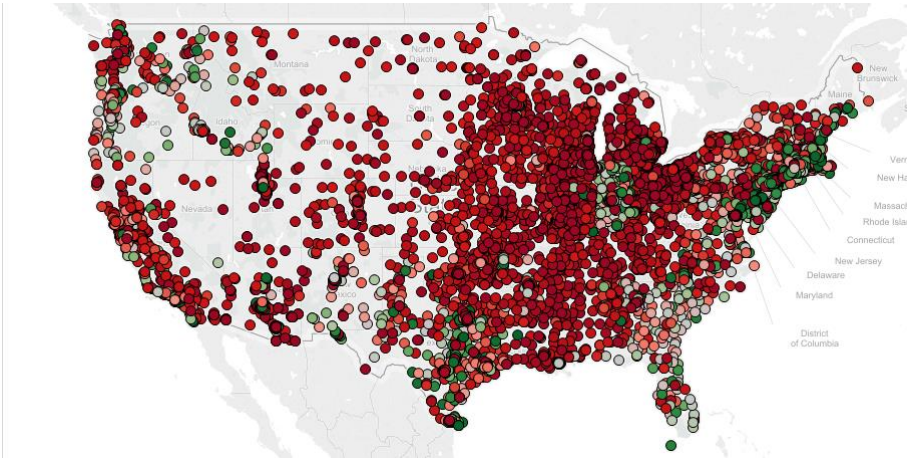
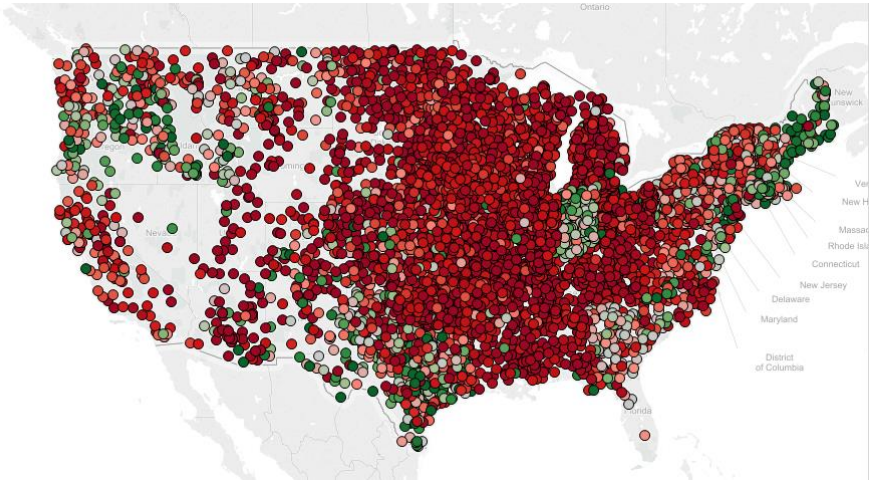


Figure 2C: PSAT Participation in Rural Districts, 48 Contiguous States, AY14-15



Source: National Center for Education Statistics Common Core of Data 2013-14 AY (Institute of Education Sciences, 2015a); College Board internal examination data, 2014-15 AY.

Previewing the Review of Knowledge for Action

In order to develop a rural strategy directed at the College Board's services, I needed to develop a greater understanding of current trends in rural education overall. In an Ed.L.D. capstone document, a resident collects background information needed for the completion of a strategic project in a "Review of Knowledge for Action," often referred to as the "RKA." My RKA consists of two pieces, an explanation of an analytic framework called the strategic triangle and an overview of rural education trends. I provide background information in five areas: federal programs, virtual learning, dual enrollment/dual credit, career and technical education, and connections to higher education.

Over the course of my residency, I discovered that the community of national practitioners and researchers concerned with rural education sees itself as both growing but also tight-knit. I was only able to gather and present the information about rural education trends through the support of individuals in this group, including many from the Rural Opportunities Consortium of Idaho, the National Rural Education Association, and the Rural Schools and Community Trust. The community's willingness to embrace me as one of their own provided me with multiple levels of nuanced learning, and I hope to add to that value to that community through the review of knowledge for action that follows this introduction.

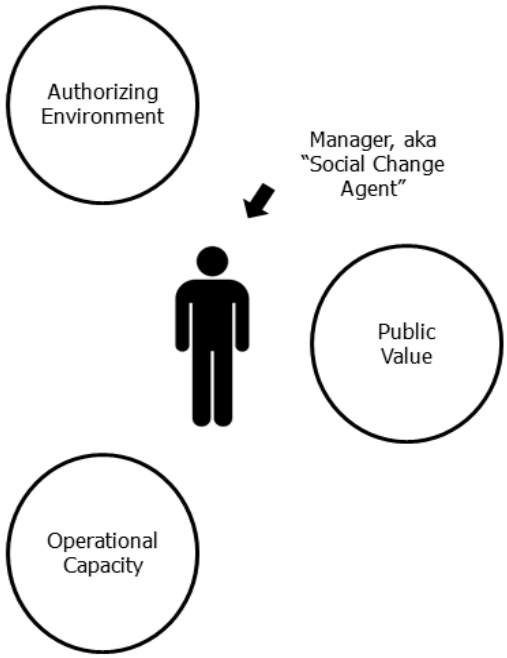
Framework for analysis. I used the strategic triangle for public value as a framework for understanding and analyzing my strategic project throughout the residency. The strategic triangle was developed by Mark Moore at the Harvard Kennedy School to help public managers envision their roles as ever-changing and public-facing. In Moore's words, the strategic triangle allows public managers to understand and make improvements to how they go about managing the authority, funds, and other resources allocated to a specific purpose. In doing so, they become what Moore calls "social change agents."

Social change agents do this by focusing on "three different aspects of their job: (1) judging the value of their imagined purpose; (2) managing upward, toward politics, to invest their purpose with legitimacy and support; and (3) managing downward, toward improving the organization's capabilities for achieving the desired purposes" (Moore, 2000, p.23). Over time, Moore adapted the framework of the triangle to provide insight to non-governmental organizations and nonprofits. In the case of the College Board, a manager executes strategy through the use of tax-exempt funds collected largely from membership dues and fees for services including but not limited to assessments, professional development, and government, business, and philanthropic contracts.

I used Professor Moore's language throughout the project to describe the first aspect as the strategy's "public value," the second aspect as the "authorizing environment," and the third as the "operational capacity." The three points on

the triangle create the framework in which the manager operates. Professor Moore describes managers, a.k.a. social change agents, as placed within a given strategic triangle in order to make change.

Figure 3: Strategic Triangle Framework



Source: Author's design, framework drawn from *Creating Public Value* (2000) and *Recognizing Public Value* (2013) by Dr. Mark H. Moore.

Conversations with Professor Moore about the strategic triangle, and the framework itself, guided the design of the work for the strategic project. My understanding of the triangle influenced everything from the language included in interview questions to the memorandum of understanding created at the beginning of the residency. Overall, I used the strategic triangle to understand the strategic project: understanding how the College Board might position itself

to provide stronger educational opportunities to a particular "task environment," rural students and their schools.

Rural strategy development at the College Board. The College Board continuously seeks new ways to increase the challenge and impact of high school learning. Policymakers and educators focused on rural students and their schools have increasingly asked the organization how we can create or expand services focused on the 10 million students currently enrolled in rural schools. Providing answers to the two subsequent questions creates the foundation of my strategic project: 1) Are there ways in which the College Board can serve as a lead partner in efforts to increase both the challenge of high school courses and the value of successful course completion?; and, relatedly, 2) Should the College Board's Advanced Placement program lead the efforts to engage rural schools?

Success in this project would involve the development of strategies generating authenticity and relevance in College Board executives, our members, and rural education advocates. I executed a project in three phases designed to create commitment from the Executive Leadership Team and to produce wider legitimacy and support within the College Board and stakeholders invested in rural education.

- **Phase 1:** Create and disseminate definitions and data sets for rural students, schools, and school districts in relation to College Board services and programs.

- **Phase 2:** Find and connect a network of support for rural-focused initiatives within the organization, create bridges between that network and external partners, and document the body of knowledge available from prior and current initiatives designed to reach and propel rural students to stronger educational outcomes.
- **Phase 3:** Develop a pilot proposal to test and implement strategies on a small scale with the intention of future scaling.

Stefanie Sanford positioned the strategic project and my residency overall in the Policy division of the College Board under Vice President of Policy Craig Jerald. When Jerald left the organization in the early weeks of my residency, Senior Director of Policy Advocacy Wendell Hall took over daily supervisory capacities. After a series of discussions in June and July, Sanford assumed the mentoring aspects of the residency. Reporting to Sanford created legitimacy for both the project and my role within Global Policy, Advocacy and Communications (GPAC) and those divisions regularly working with GPAC. Potential downsides of this position included distance from the more central New York office and the AP division located therein.

The two organizational charts below, Figures 4A and 4B, show my position as "Policy Fellow" in the context of the larger organization. The first chart reflects the context prior to Jerald's departure, with Jerald reporting to Sanford on the project while serving as both supervisor and mentor. The second chart shows the context as of July 2015 with Hall serving as supervisor and Sanford serving as

mentor. I include in both charts only those divisions most involved in and influenced by my entry into the College Board.

Figure 4A: Strategic Project Organization Chart, May 2015

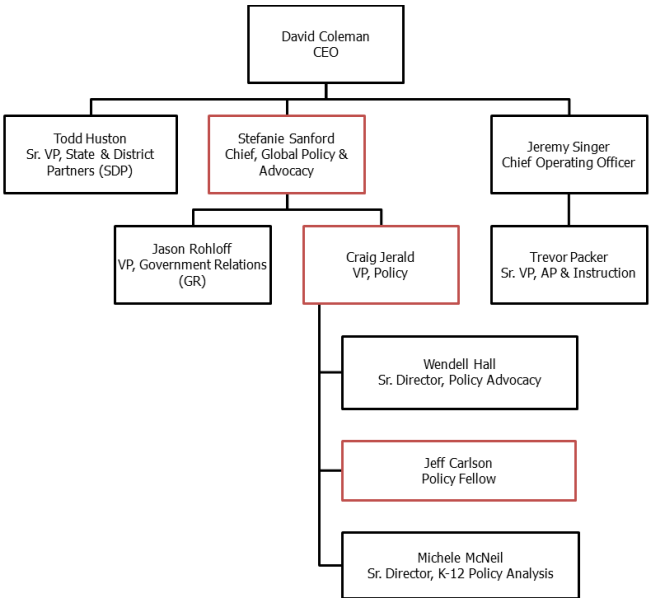
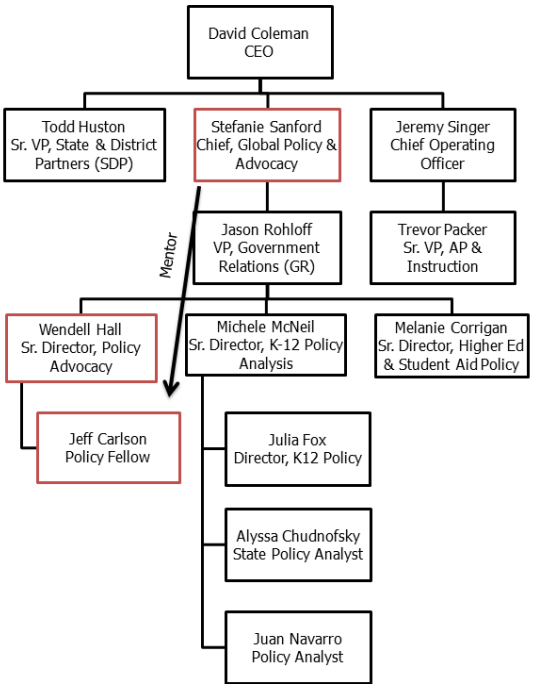


Figure 4B: Strategic Project Organization Chart, July 2015



Source: Author's design.

Implications for a Rural District

The following school district description serves to put the strategic project into the perspective of learners in a specific community. The work of my residency, in a nutshell, is to provide the College Board with the analysis and context necessary to understand how to best influence students and educators in rural school districts. While rural schools and communities vary across the country, my background positions me to speak for students such as those enrolled in Mountain View School District #244 in Grangeville, ID—the district my family calls home. Mountain View stretches from Oregon to Montana and covers 8,300 square miles. It is the sixth largest district by square mileage in the country and covers more land area than the state of New Jersey. Its nearly 16,000 residents enjoy a population density similar to that of Alaskans, and the district serves about 1,200 students in five schools with populations ranging from 22 to 500 students (MelissaDATA, 2016).

In 2011, the state of Idaho passed legislation requiring high school students to take the SAT in order to graduate, starting with the graduating class of 2013 (Russell, 2011). The state pays for the cost of the exam and does not require a particular score for graduation. Administrators in District #244 have little personal or professional experience with the SAT and have elected to offer zero Advanced Placement courses either due to cost or lack of interest. Community stakeholders question the college entrance exam requirement, the recent AP U.S. History revisions, and why they should believe a newly revised

SAT serves as a better exam than the test historically given in Idaho, the ACT. How can the College Board provide support to these administrators and their peers?

While the Central Idaho district described here is anomalous in geographic size, one can consider thousands of districts with similar student populations and relatively low interaction with the College Board and ask these two questions: 1) Can the College Board function as a well-received and effective partner in these schools?; and 2) Should its Advanced Placement program guide the development of potential partnership with districts similar to Mountain View? I designed and took on a strategic project seeking to answer these questions.

Review of Knowledge for Action

This review contains two sections describing the subject matter knowledge required to enter the College Board in June 2015 and begin the work of the strategic project. The first piece provides a review of the strategic triangle described in the introduction. The descriptions draw heavily on Mark Moore's two texts on the subject, *Creating Public Value* and *Recognizing Public Value*. The second section of the RKA describes current trends in rural education, including federal program definitions and categories, virtual learning, dual enrollment, career and technical education, and connections to higher education. In order for the College Board to understand its potential role in elevating educational outcomes for rural students, I needed to create a fact base drawn from how other organizations and government agencies create structures describing various characteristics of rural areas.

The Strategic Triangle

In 1995, Mark Moore laid out in print his conception of a strategic triangle, an "organizational strategy adapted for the public sector" developed with colleagues at Harvard's Kennedy School of Government:

> "In this conception, an organizational strategy is a concept that simultaneously: (1) declares the overall mission or purpose of an organization (cast in terms of important public values); (2) offers an account of the sources of support and legitimacy that will be tapped to sustain society's commitment to the enterprise; and (3) explains how the

> enterprise will have to be organized and operated to achieve the declared objectives. (Moore, 2000, p.71)

Overall, the strategic triangle asks managers to analyze these three aspects of their enterprise when thinking about how to improve or expand their work—and to think of them as three interconnected sides of a triangle that should shape strategy formation. The College Board, a privately operated nonprofit, operates in a world highly tied to government spending and the publicly funded education sector. Moore's framework provides a lens to evaluate potential policy and strategy decisions throughout my project to illuminate the strengths and weaknesses of individual choices and the strategy overall.

Over the course of my residency, I described the strategic triangle to others using the following terms and definitions to develop a common understanding of the strategic triangle's vertices and its purpose: (1) Operational Capacity: those technical skills held by an organization necessary in the creation of its "product;" (2) Authorizing Environment: how and from whom an organization attracts support for its "product" both internally and externally; and (3) Public Value: an organization's "product," produced and distributed at a reasonable cost.

I chose to apply the strategic triangle in residency because of the framework's ability to diagnose tensions between various sets of capacity, authority, and value. Increasing any of the three parts of the triangle requires changes to the other two, and many times a manager can make stronger decisions by determining which strings to pull within an organization's operation,

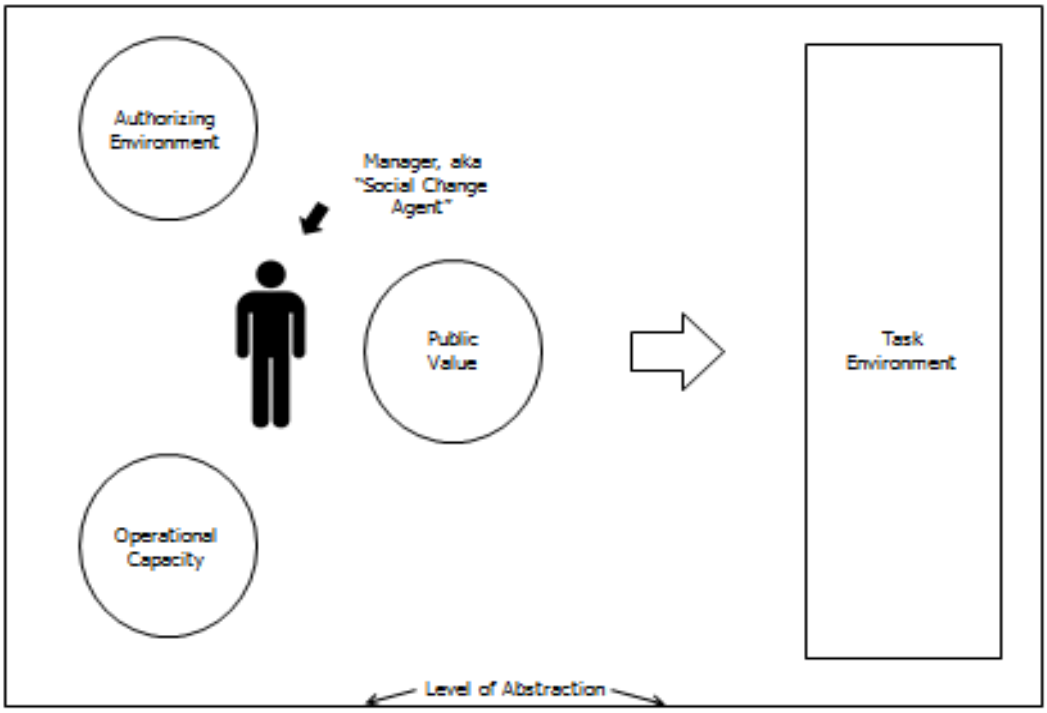
authority structure, or value proposition. For me, the magic of the triangle stems from the ability to diagnose how certain choices may improve or upset the rest of the system.

Moore's strategic triangle provides more insight with the addition of three supplementary elements: the position of the manager or "social change agent," the "task environment" influenced by any single strategic triangle, and the "level of abstraction" at which a manager positions her or his work. Figure 5 below shows the social change agent and her or his work placed within a particular strategic triangle. The value of that work, termed the value proposition, points outward from the triangle toward a particular landscape on which the social change agent hopes to enact a particular change. Moore's framework refers to this landscape as the task environment—the individuals, organizations, or societal interests that will be changed by the work of the social change agent.

Finally, a social change agent should position the particular strategy at the proper level of abstraction. In a narrow sense, a strategy may include one person changing their capacity and the authorizers influencing her or him in order to create a stronger value for their work. This is an individual level of abstraction, with a strategic triangle and task environment relating to the work of an individual. A strategy involving multiple stakeholders, organizations, or purposes should be thought of as a wider level of abstraction, much as a photographer widens a lens to take in more of the landscape. Additionally, any organization will have multiple strategic objectives at any given time, and a

discussion of levels of abstraction can help a social change agent sort strategy lenses ranging from a tight, more simplistic objective to wider, more complex goals.

Figure 5: Full Strategic Triangle



Source: Author's design, framework drawn from *Creating Public Value* (2000) and *Recognizing Public Value* (2013) by Dr. Mark H. Moore.

The strategic triangle at the College Board*.* The College Board has two main sources of capacity. Products make up the first source, such as exams, curricula supports, and data systems. Its employees make up a second source, those who deliver products to school districts, schools, and students across the United States and internationally. Many in the field of education shy away from discussing their work in terms of products, services, and markets. As employees at a nonprofit, many colleagues at the College Board share this sentiment and

know that it is held by many individuals working with schools. In order to provide consistency throughout the capstone, I use the term "product" to refer to both the services the College Board provides as well as its people. In *Recognizing Public Value*, Moore addresses differences in terminology in public and private sector value creation. In public sector work, the term "product" can apply both to an improvement in a given social condition as well as the individual who benefits from the improvement (Moore, 2013). For the College Board, the most tangible product of organizational success would be both improved education outcomes due to research and advocacy and also expanded participations in its assessments. As opposed to a privately produced device or widget, however, this organizational success manifests itself in the students who are impacted by that same research, advocacy, and assessment.

The basic authorizing environment for the organization includes both formal and informal strands of legitimacy and support. In its nonprofit membership structure, the board of trustees, membership, and executive team provide formal authority to the operation of College Board. More informally, public sentiment toward our products, our customer service, and assessment practices overall contribute in varying ways to the College Board's amount of political capital found in the authorizing environment.

The College Board regularly looks to increase the value of its products, people, and services in two ways. First, one might look for increased numbers of American rural high school students interacting with College Board services and

programs during their education. To measure this value, one would build metrics focused on *participation*. Second, one could look to increase the numbers of American rural high school students who elevate their levels of education success through College Board services. One would measure this value in terms of increased *performance*. Moore describes this effort as building an account of publicly usable value, which an organization can measure through a public value account and monitor using a public value scorecard (Moore, 2013).

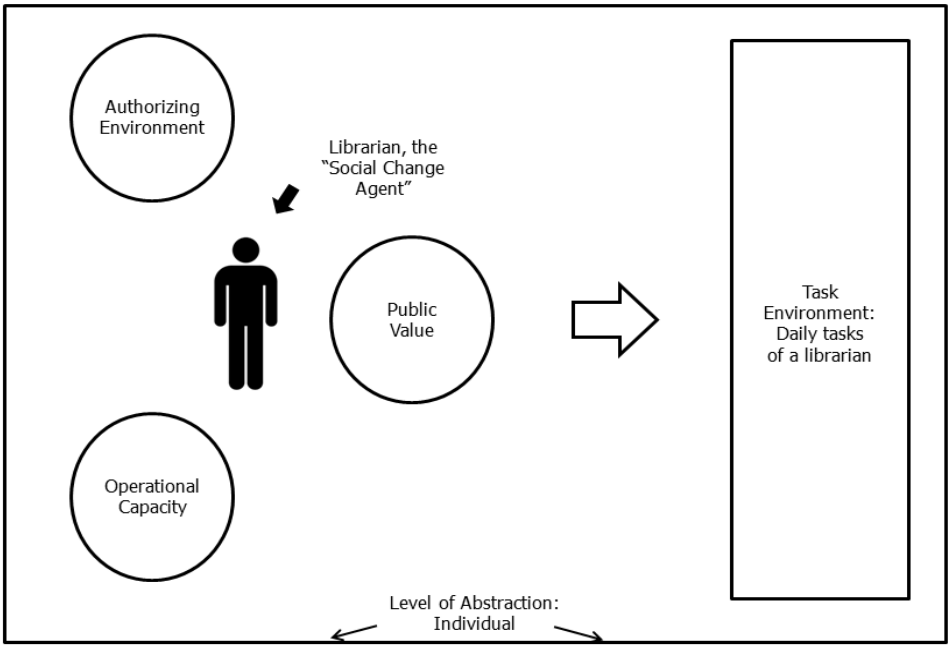
One goal of the strategic project is to promote the value of a rural strategy as a metric itself. The College Board can measure this by noting whether the organization devotes more *organizational structures,* including time, staff, and conversations explicitly devoted to rural students and their schools in terms of human capital, funding streams, and policy formation. In order to measure the strategy's success over time, the organization should create an accounting system than can determine whether a rural strategy leads to increased public value in the form of increased organizational commitment as well as participation and successful performance by rural students in College Board programs.

Table 1: Potential Measurements of Public Value

Organizational Metrics	Participation	Performance
○ FTE devoted to rural initiatives ○ Rural strategy appearing in executive agendas ○ # of colleagues engaged in rural initiative ○ Frequency of rural conversations	○ PSAT ○ SAT ○ Advanced Placement ○ Gap closure between rural students and peers ○ # of school districts utilizing CB services	○ PSAT ○ SAT ○ Advanced Placement ○ Gap closure between rural students and peers ○ Students applying/ enrolling in two- and four-year

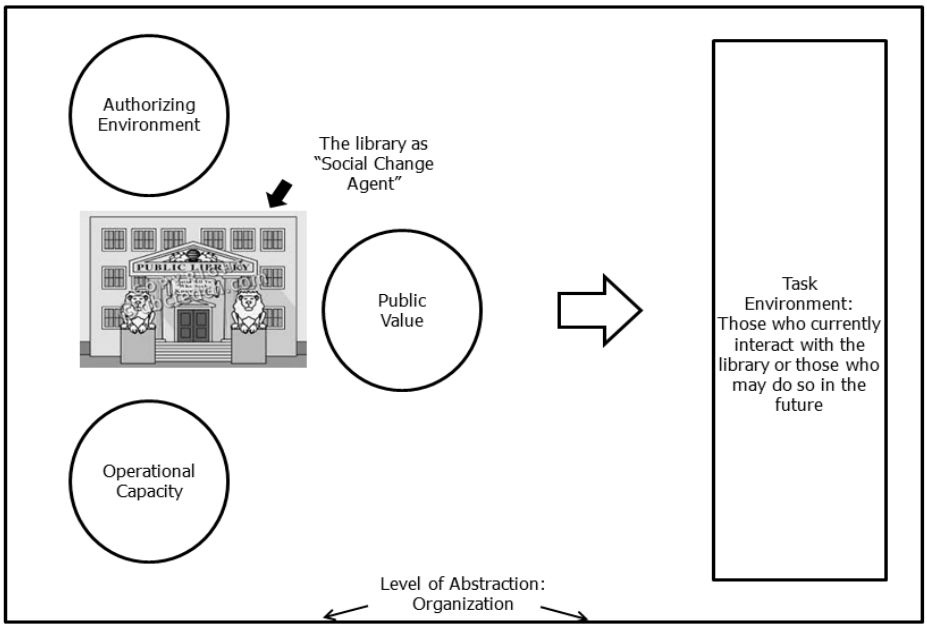
Example of a City Librarian. As an example of a narrow, individual level of abstraction, Moore writes about a librarian deciding how to best utilize her skill set and the forty hours allotted weekly to her position as a particular value proposition with the potential to create positive change among her colleagues and those visiting the library during her working hours. Next, for an organizational level of abstraction, imagine the library itself and the collective staff. How might the library itself create change that could influence operations with the governmental structures and policies of a city?

Figure 6A: Librarian as Social Change Agent
(Individual Level of Abstraction)



Source: Author's design, framework drawn from *Creating Public Value* (2000) and *Recognizing Public Value* (2013) by Dr. Mark H. Moore.

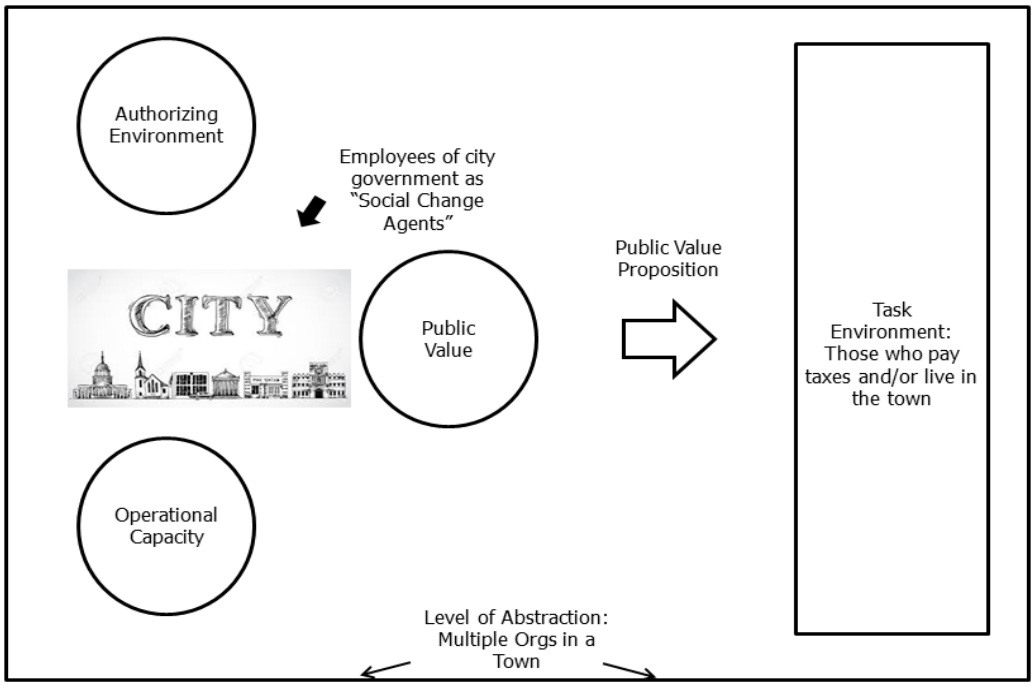
Figure 6B: Library Staff and Resources as Social Change Agents (Organizational Level of Abstraction)



Source: Author's design, framework drawn from *Creating Public Value* (2000) and *Recognizing Public Value* (2013) by Dr. Mark H. Moore. City library image from ABCteach (2015).

Further, how could the employees and resources of a city government band together to create positive change in the city they serve? At this level of abstraction, we zoom out beyond one organization to envision social change throughout a town—a much wider and more complicated level of abstraction than one individual making a change in her or his daily work. A narrow level of abstraction focuses on goals and objectives, whereas a wide level of abstraction likely focuses on the mission or vision of an organization or group due to the enlarged scope. In determining the effectiveness of various strategies, a manager must view the strategy through the appropriate level of abstraction.

Figure 6C: City Government as Social Change Agents (Community Level of Abstraction)



Source: Author's design, framework drawn from *Creating Public Value* (2000) and *Recognizing Public Value* (2013) by Dr. Mark H. Moore. City image from Clipart.me (2015).

Trends in Rural K-12 Education

As the College Board looks to better meet the needs of students currently educated in schools outside urban and suburban areas, it is important to understand the layers of distinction held within discussions of rural education and rural public policy more broadly. As described below, the diversity of approaches in rural education stems from scattered federal definitions, disconnected state approaches, and variation between public, private, and nonprofit organizations. I set out to collect information in five areas to enhance and clarify my understanding of issues in rural education. This understanding would also allow me to create a stronger authorizing environment for a rural strategy. I write about five trends: 1) federal rural education programs and various rural

definitions within rural education; 2) virtual learning; 3) dual credit or dual enrollment; 4) career and technical education; and 5) connections between rural K-12 and higher education.

Federal definitions*.* The federal government typically views rural education through three program lenses: the Small, Rural School Achievement Program and the Rural Education Achievement Program (REAP) at the U.S. Department of Education, the Schools and Libraries Program (E-Rate) at the Federal Communications Commission, and data collection via the National Center of Education Statistics (NCES) (Geverdt, 2015a). The definition used for each of these purposes varies, in turn creating different groups of districts, schools, and students. In general, federal programs and the U.S. government have adopted NCES rural definitions. This occurred when NCES implemented the Census Bureau's revised urbanicity definitions in 2006 (NCES, 2015). Termed "urban-centric locale categories" in order to distinguish from the previous "metro-centric" system, the overall classifications define city, suburban, town, and rural categories—each with three subcategories. In order of increasing remoteness, the rural subcategories are fringe, distant, and remote.

- Fringe: Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster.
- Distant: Census-defined territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is

more than 2.5 miles but less than or equal to 10 miles from an urban cluster.

- Remote: Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster (NCES, 2000).

In each definition, the Census Bureau classifies rural territory by what it is not—that is, by its lack of urbanized areas and urban clusters. Urbanized areas (UA) and urban clusters (UC) are the two types of urban areas classified by the Census Bureau. UAs contains 50,000 or more people whereas UCs contain at least 2,500 and less than 50,000 people (U.S. Census Bureau, 2015). Rural territory is therefore land with a population under 2,500 at some distance from UCs or UAs. The amount of distance to UCs or UAs defines the subcategories of remoteness—the most remote being more than 25 miles from a population center of 25,000 and more than 10 miles from a cluster of 2,500. Multiple reports focused on rural education devote similar paragraphs or pages simply to define the term rural (Player, 2015; Johnson, 2014; Smarick, 2014; Stuit, 2012).

Creating a general understanding of rural across encompassing subgroups (fringe, distant, remote) would be an important first step in building a shared knowledge base about rural schools. The College Board rarely reports out data based on locale code. Despite this, many employees would be able to give a fairly clear definition of an urban school or district due to regular interaction with many of the large districts in the country. In my case, describing how the federal

government defines rural schools, districts, and communities would position me as one of few who could speak about rural education with more legitimacy.

Category creation*.* Beyond census definitions, rural education data also varies when it comes to measuring outcomes at the student, school, or district level. For many years, specific homes or schools were typically not classified by locale code. Due to improvements in geocoding technology and the 2006 move toward four urban-centric types with three subcategories, schools are now assigned a locale code based on their precise geographic location. School districts, in turn, derive their locale code based on the locale codes of the schools within that district. Fifty percent or more of public school students in a district must attend schools with the same locale code in order for that district to be assigned that same locale code. If no individual locale code accounts for half or more of the public school students, the district is assigned the smallest or most remote subcategory within the major category (city, suburb, town, or rural) that represents the greatest percentage of students (Institute of Education Sciences, 2015b).

This murky path to district classification, similar to the nuanced differences between locale codes, becomes tricky in practice. Take for instance the case of central Idaho's Mountain View School District described in the introduction. The district's 1,200 students attend five schools ranging from 22 to 500 students, but over 50% of students attend two schools in the Grangeville, ID urban cluster, population 3,141. With over 2,500 residents, Grangeville and its

two schools make the entire school district fall into the "town-remote" category (U.S. Census Bureau, 2014). Those students attending schools as small as 22 students outside of Grangeville, along with all those students residing in remote areas far from Grangeville who take a bus or are driven into town for school each day, are by NCES' district definition considered "town" students. This changes the district's eligibility for federal funding under various programs. In order to better reflect contextual differences highlighted by districts such as Mountain View, the state of Idaho passed legislation to create a statue defining rural districts (Idaho State Legislature, 2009). While helpful in practice, this adds another level of definitional confusion.

Mountain View School District is an anomaly in size even within the state of Idaho, but the same issues can be seen across the country—particularly in mountainous Western states or Southern states whose school districts lines mirror county lines. In such districts, the census-derived locale codes mean far less as the district is shaped purely based on its relationship to county boundaries. The Census Bureau and NCES can only hope to *overlay a categorization system overtop* of existing district lines—they do not *draw the district boundaries* themselves.

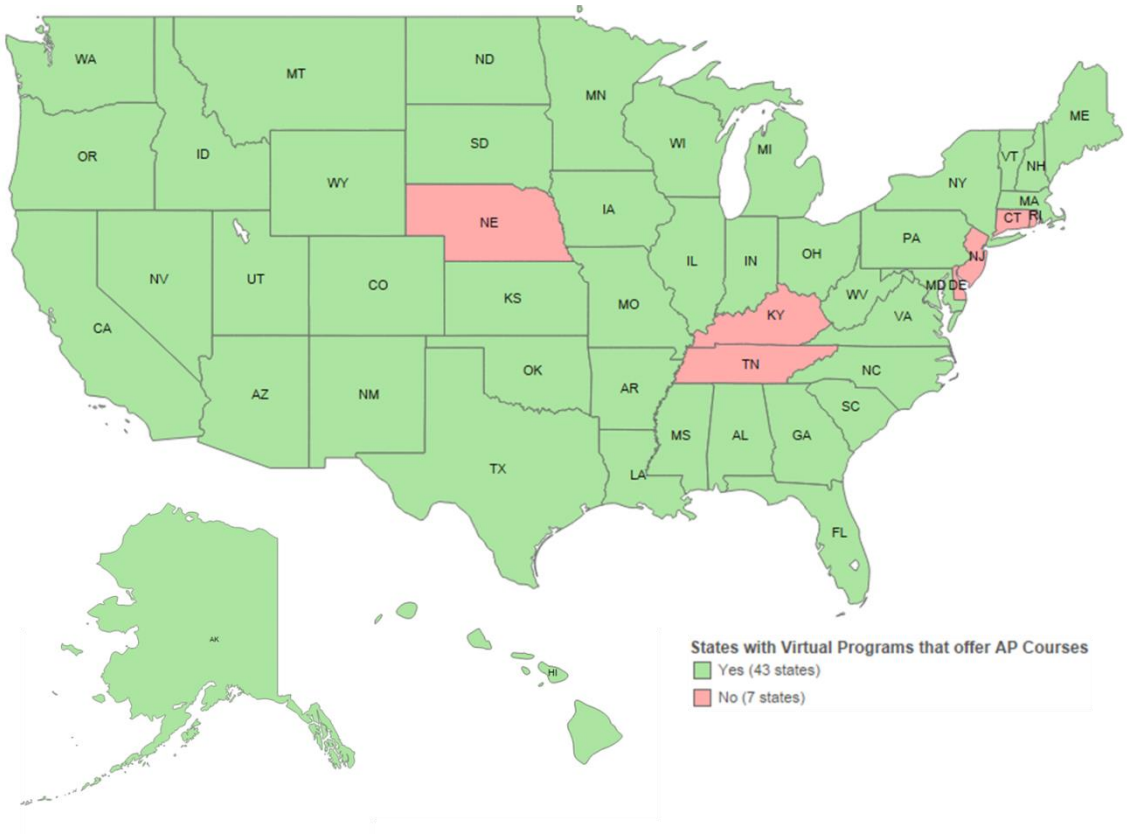
In practice, pulling data from either school- or district-level sources results in large differences in the numbers of rural students reported by various entities—including the federal programs discussed at the head of this section—with school-level sources showing increased numbers and percentages of rural

students than district-level data sources (Geverdt, 2015a). As I sought to develop a rural strategy, I would first need to determine whether the College Board should focus its analysis at the school or district level for both operational and strategic purposes. I would also need to understand the methods by which students receive instruction in rural areas. The next trends I write about are three of those methods, virtual learning, dual enrollment/dual credit programs, and career and technical education.

Virtual learning. This section addresses the following three areas to understand potential College Board methods of entry into virtual learning: virtual programs for Advanced Placement courses, partnerships for assessment practice, and internet capabilities within rural schools. First, colleagues in the Policy division and I wanted to understand how states were attempting to improve access to both Advanced Placement and virtual learning in rural schools. Policy produced an internal document for our State and District Partnership and Government Relations teams outlining the role of Advanced Placement in state-based virtual learning programs. She discovered that, as of 2015, forty-three states have offered AP courses via a virtual learning program.

These courses are provided through a variety of means including state-owned virtual platforms and contracts with private companies such as K12 and Apex learning. States funded these programs in at amounts ranging from $390,000 in Missouri during AY13-14 to $18.5M in Alabama during AY14-15. Figure 7 shows the states currently offering virtual AP programs.

Figure 7: States with Virtual Programs Offering AP Coursework



Source: Chudnofsky (2015). State Watch Trend Update: Virtual AP.

Within the College Board, Advanced Placement as a program has had little involvement in the creation of virtual AP programs. AP's course audit program approves curriculum for AP courses that allows them to be offered via virtual means, but does not explicitly promote that purpose. A teacher may submit a curriculum for an AP Government class and have it approved, and then choose to teach that curriculum to students via a virtual school, but AP Program does not control or recommend any particular process that differentiates those curricula used in traditional classrooms versus online courses. Appendix A provides the approximate number of AP courses offered by state, the number of course

enrollments in state virtual programs, examples of AP offerings at state virtual schools, and the number of student enrollments in state virtual schools.

Other virtual platforms exist beyond those a state may provide or contract out. In 2015, the online course provider edX announced a partnership with the nonprofit Modern States Education Alliance named "Freshman Year for Free" that included a program designed to provide a virtual course for every major subject covered by the College Board's AP and CLEP examinations. In both the press release from January 2015 and my follow up conversations with edX and individuals within AP, the partnership between edX, the College Board, and Modern States remains limited (edX, 2015). The website for edX offers multiple courses designed to prepare students for AP exams but does not partner specifically to offer the courses through the College Board.

Outside of AP, the College Board began a long-term partnership with another online nonprofit, Khan Academy, during the first month of my residency. The College Board provides Khan Academy with banks of questions, allows students to connect the results of PSAT and SAT exams to Khan in order to receive personalized lessons based on areas of strength and weakness, and does this all at no cost to students. Independent of College Board, Khan Academy continues to lead the development of online content delivery with substantial philanthropic backing. In particular, Khan has partnered with the J.A. and Kathryn Albertson Family Foundation to create Khan Academy Idaho to pilot statewide a virtual classroom supporting teachers and their students. Sal Khan

himself led a training session of over 250 Idaho educators in 2012, and the organization continues to publish content developed specifically to increase math knowledge in the state (Phillips & Cohen, 2015). To date, AP Program and Khan have established connections to deliver AP content in ways similar to the Khan/SAT partnership.

Content delivery over the internet requires increasingly modernized access to hardware, as well as internet speeds that can deliver content to schools efficiently and effectively. In 2014, the Federal Communications Commission overhauled and then expanded the E-rate program, formally known as the "schools and libraries universal service support program." Through E-rate, the FCC offers schools and libraries discounts for internet access, commercial telecommunications services, and the equipment needed to access service (Universal Service Administrative Company, 2015). That same year, E-rate received a $1.5 billion annual funding increase to provide additional purchasing capacity. The program has played a substantial role in increasing the number of schools with internet access. As of early 2015, 60% of public schools educating more than 40 million students now provide the internet bandwidth currently recommended by the Obama administration (Cavanagh, 2015). Demand for online advanced coursework will likely increase as more and more rural schools fully connect to the internet with bandwidth capable of synchronous virtual learning. While this may impact AP more specifically in the future, other providers of advanced coursework currently operate in rural schools. Dual

enrollment programs, also known as dual credit or concurrent enrollment, continue to expand in rural areas.

Dual enrollment/dual credit. Dual enrollment, or dual credit, programs allow students access to advanced coursework across the country. Dual enrollment programs require a partnership between a school or district and an institution of higher education. Courses include both academic and career and technical offerings and may be taken on a college campus or high school classroom. Generally, postsecondary faculty or secondary teachers teach the courses on campus or in high schools. In some cases however, particularly in rural areas, students access courses through distance education.

These programs are known as dual enrollment, dual credit, or concurrent enrollment depending on the particulars of the each program. Dual enrollment is broadly defined as the opportunity to earn both high school and college credit simultaneously. The coordinating organization for dual enrollment defines concurrent enrollment as a subset of dual enrollment where students are taught by high school faculty. However, the terms are used interchangeably by course providers and consumers (Lowe, 2010).

Yet another version of dual enrollment programs take place in early college high schools, most specifically through the Early College High School Initiative established in 2002 with support from the Bill & Melinda Gates Foundation and other philanthropies. Early college high schools attempt to create a smoother transition between high school and postsecondary study through

aligned curricula, partnerships with institutions of higher education, and tuition-free college credit through dual enrollment courses (Jobs for the Future, 2015). These programs are not direct competitors with Advanced Placement programs but do occupy the same advanced coursework landscape for districts and states. The College Board regularly advocates for the general expansion of advanced coursework offerings, but would rather see specific legislation and programming targeting Advanced Placement explicitly.

Dual enrollment programs reached 1.4 million high school students in academic year 2010-11. Those students took over 2 million college courses and represent approximately 10% of the high school population. That same year, almost half of schools with dual enrollment programs engaged students with career and technical education courses. Of those postsecondary institutions with dual enrollment programs, 83% hosted courses on campus, 64% reported courses on high school campuses, and 48% taught courses through distance education. Rural and town high school settings utilized distance education the most. Among public high schools with any type of dual enrollment offering, the following percentages of schools offered distance education: 38% of rural, 28% of town, 13% of suburban, and 15% of city schools. Overall, the percentage of high schools with students enrolled in dual enrollment reached 82% by academic year 2010-11 (Thomas, Marken, Gray, & Lewis, 2013). Additionally, the percentage of rural students attending schools offering dual credit courses was similar to the percentages of their peers in other locales, while rural areas see

lower percentages of schools offering Advanced Placement and International Baccalaureate programs (Provasnik et al., 2007).

States support dual enrollment courses in ways similar to how they support AP programs. Perhaps the biggest difference is that many states utilize dual enrollment particularly for the growth of career and technical education. States see AP as an opportunity for enhanced academic coursework, but have funded dual enrollment programming for both academic and career-technical purposes (Chudnofsky, 2016). Given their similar purposes in high schools across the country, dual enrollment and AP courses can be seen as both partners in providing advanced coursework options to students as well as competitors for funding and prestige.

Career and technical education*.* Overall, approximately 12.5 million students nationwide engage in career and technical education (CTE) courses. Advance CTE reports that those students who choose to take extensive CTE coursework, known as concentrators, graduate from high school at rates above 90%, compared to the 2011-12 academic year overall rate of 80%. CTE divides its content areas into 79 "career pathways" that are rolled into 16 "career clusters." High school CTE educators based their courses within particular career pathways that are many times designed to be aligned with careers available in the geographic region of the high school (Advance CTE, 2015).

The federal government provides funding to CTE through a variety of programs, but the largest single source of federal support stems from funding

through the Carl D. Perkins Career and Technical Education Act (Perkins Act). Congress reauthorized the Perkins Act for the first time in 1984 and most recently in 2006 for the fourth time (Threeton, 2007). The Office of Career, Technical, and Adult Education (OCTAE) supports states in the implementation of CTE programs and also provides specific support for Native American communities, community college programming, and nontraditional college students.

As part of the Perkins Act, Congress authorizes programming found in nine student membership organizations known as Career and Technical Student Organizations (CTSOs). FFA, the largest and perhaps best known CTSO, focuses on the agriculture, food, and natural resources career cluster and counts almost 630,000 students as members nationwide (National FFA Organization, 2015). In total, the nine organizations enroll more than 2 million student members. CTSO missions focus on extending the learning taking place in CTE classrooms through business and community partnerships and leadership experiences in localities, states, and nationwide (ACTE, 2015).

Many rural schools see CTE as a way to engage their students and provide options for postsecondary success in a career that is relevant to the students they serve. An article in the journal *Education Next* noted in 2015 that career and technical education could help increase the number of rural inhabitants with postsecondary education—combatting the brain drain that is many times seen in rural communities when well-educated students attend college or university far

from the high school they attended, rarely coming back following their graduation (Fishman, 2015). Students in small schools, more likely to be found in rural areas, focus on CTE education more than their peers in large schools. While the percentage of students concentrating in career and technical education in high school has decreased over time, students from high schools with fewer than 1,000 students concentrate in CTE at rates nine percentage points higher than their peers in schools with more than 2,000 students, 21% and 12% respectively (Dalton, Lauff, Henke, Alt, & Li, 2013).

Overall, career and technical education and affiliated student organizations are more accessible to rural students than programs such as Advanced Placement. NCES even reports that the percentage of secondary teachers teaching career and technical education is larger in rural areas and towns than in cities and suburbs, with rates 14% and 10%, respectively (Provasnik et al., 2007). The maps in the capstone's introduction showing AP participation in rural districts compared to these statistics showing fairly broad access to career and technical education reveal the opportunity for growth in Advanced Placement and other advanced coursework throughout rural America.

Connecting to higher education. Increasing educational opportunities for America's students continues to be a political and economic rallying cry. William Bowen and his colleagues summarized this sense of the nation in their oft-cited 2009 book, *Crossing the Finish Line*, when they wrote that the first challenge to address is the low and stagnant level of educational attainment in

the United States. In that book, they highlighted the undermatching phenomenon. Students "undermatch" if their qualifications for postsecondary opportunities are stronger than those found in the student body of the institution they end up attending. Or, it could mean that students do not attend any postsecondary institution even though they had the qualifications to do so (Bowen, Chingos, & McPherson, 2009).

Researchers Christopher Avery and Caroline Hoxby and organizations including the College Board have published numerous research briefs and reports documenting the undermatching issue. Rural students have been found to be more likely to undermatch than their peers (Hoxby & Avery, 2013; Smith, Pender, & Howell, 2013). High-achieving rural students tend to be isolated, as opposed to their suburban and urban peers who are clustered together, making it difficult for colleges and universities to find them. Rural students, their communities, and institutions of higher education all stand to gain from the College Board increasing its ability to enhance educational opportunities of rural students through its suite of assessments, its efforts in Access to Opportunity, and by becoming a stronger advocate for its rural school membership.

Strategic Project Theory of Action

The Ed.L.D. program asks residents to develop a strategic project theory of action in order to frame the residency process and capstone as a series of actions and consequences leading to certain results. I wrote the following theory of action based on the idea that, if I were to accomplish each of the tasks outlined, I would in essence be outlining a public value proposition for the engagement of rural schools. In this way, I defined my project as an attempt to test the idea that a specific rural strategy was needed, and to have that idea examined by senior leadership. The goal of my strategic project was to provide an understanding of the conditions, information, and capacities needed for a successful rural strategy. Given that, the Executive Leadership Team at the College Board can make a well-informed decision as to whether time, talent, and treasure should be invested in the pursuit of a specific strategy for rural schools. With that in mind, I developed this theory of action:

If I…

- gather evidence on past practices and results of prior attempts to engage rural communities;
- create opportunities for College Board employees and external stakeholders to discuss rural education at the College Board; and
- present data-driven proposals for rural school and community engagement at the state or regional level;

then members of the Executive Leadership Team at the College Board will…

- determine whether a rural strategy for Advanced Placement or other programming should be developed;

and then, if that determination is positive, the ELT will;

- determine how to execute a strategy formation process and assign individuals responsible for implementation; and
- ultimately authorize a new set of priorities focused on higher participation and success in College Board programming in rural schools.

This theory of action did not presume that the College Board should invest in a rural strategy. Rather, it was intended to develop a value proposition for work with rural schools and then determine whether that proposition found current resonance with the leadership team of the organization.

Rural Strategy Development in Three Phases

In this section, I describe the strategic project in three phases: 1) learning and listening; 2) case studies and becoming embedded in the organization; and 3) pilot development. The listening and learning phase began in spring 2015 with residency planning meetings and drew to an end in October 2015 as initial background interviews ended. I pursued two objectives for the twelve weeks following August 1. First, I conducted a qualitative study of ongoing work at the College Board involving rural areas. I also embedded my work into the Policy, Advanced Placement, Government Relations, and State and District Partnership teams at the College Board. By November 2015, I embarked on a third phase of the strategic project as I developed a plan for a future pilot with explicit, concrete goals focused on rural schools and communities.

Figure 8: Three Phases of Residency

Source: Author's design.

I analyze the value proposition project through the strategic triangle three times in this section of the capstone. I use the triangle to test the value proposition at three levels of abstraction: prior attempts to build rural strategy, rural strategy at the start of my residency, and a pilot project strategy at the end

of my project. Each series of analysis includes a description of the strategic triangle in this order: 1) the social change agents positioned to execute a strategy, 2) operational capacity, 3) authorizing environment, 4) public value, and 5) task environment. A diagram follows to visually depict my analysis and includes the public value proposition underlying each version of the strategy.

Before moving into description and analysis of the strategic project, it is necessary to clarify two terms used throughout the capstone. Overall, I refer to my strategic project as the development or reframing of a "College Board Rural Strategy," shortened to CBRS on many occasions. For much of the first two phases of the project, I speak of the work to position Advanced Placement in rural areas as a "Rural Advanced Placement Strategy," or RAPS. The pursuit of AP expansion was a subset of the larger goal to create a rural strategy for the entire organization. During the second phase of the residency, I used CBRS and RAPS interchangeably as my work consisted largely of trying to understand the role of AP in rural areas. I stopped using the terminology RAPS by November 2015. This marks both a shift in language but also a strategic shift in the description and goal of the project itself.

Strategic Triangle 1: College Board Rural Strategy before Residency

The College Board had attempted to develop a strategy specific to rural schools prior to my residency. This institutional history is needed to understand how the strategic project advanced over time. The strategic triangle provides a way to describe how the organization positioned the development of a rural

strategy as it existed before the residency, so I begin this section by considering the College Board's rural strategy prior to my arrival, the first of three full strategic triangle analyses in this section.

When evaluating the strategy through the triangle frame, I start by defining the public value proposition of the project. The strategy must be developed and believed in by the people who will execute it as well as the individuals who will be impacted. For this strategic triangle, I summarize the value proposition as: the College Board can gain a net market share increase and support from stakeholders overall if more rural schools utilize products such as Advanced Placement and the SAT. In an effort to impact as many students as possible, the 10 million students in rural schools creates a worthwhile market.

The social change makers focused on developing a rural strategy included a number of College Board employees. Stefanie Sanford hoped to have a sensible set of objectives and metrics available to members of the government relations and state and district partnership teams to use with rural schools, rural legislators, and state education agency staff. Within Sanford's division, Julie Harris Lawrence, Senior Director of Teacher Outreach, and Cory Rountree, Director of Government Relations, had invested time and energy into potential solutions for rural legislators in Texas. In his role as CEO, David Coleman led the College Board in developing strategies for improved participation and performance on College Board assessments with a particular focus on low-income students, student of color, and others who were likely to be successful in

AP courses. An internally developed tool called AP Potential showed school administrators a list of students whose performance on the PSAT made them likely to succeed in AP courses. This led to higher AP enrollment by underrepresented students in many schools. While this work had gained recognition within the College Board and externally, Coleman and Sanford wanted to know if particular strategies may be necessary in order for rural students to take part in the new organizational trajectory.

Triangle 1: operational capacity*.* The organization had a variety of assessments and other products available to fill the operational capacity point of the triangle. The SAT, PSAT, Advanced Placement, and College-Level Examination Program (CLEP) programs could all provide opportunities depending on need and demand. AP has historically been seen as the strongest program for the College Board to lead with as it is widely respected and provides curricular frameworks to educators that develop student knowledge before assessing it. Most other College Board products are solely examinations. Operational capacity of the College Board is also a matter of staff capacity, and a rural strategy would need to be developed, executed, and evaluated by individuals working within the Government Relations (GR), State and District Partnerships (SDP), and Policy divisions. These divisions were led by Jason Rohloff, VP of Government Relations, Todd Huston, Senior VP of State and District Partners, and Craig Jerald, VP of Policy, respectively, with Rohloff adding Policy to his portfolio following Jerald's departure. New products and services were also seen as

providing potential capacity in a rural strategy. This included marketing and implementation strategies for newly redesigned PSAT and SAT exams, new partnerships with organizations including Khan Academy, Project Lead the Way, code.org, and edX, and policies and structures that had been designed to boost rural student outcomes in Florida, Texas, and Colorado.

Triangle 1: authorizing environment*.* The group of divisions collected within Global Policy, Advocacy and Communications (GPAC) at the College Board provided the strongest authorizing environment for rural work. Stefanie Sanford heads GPAC, which includes most of the divisions whose members would provide the operational capacity for a rural strategy. In addition, the GPAC and SDP teams had recently instituted state-facing structures called Unified State Strategy (USS) teams where all the colleagues whose work took place within a given state convened at least monthly to foster collaborative work. Multiple teams had been attempting to create state-specific strategies for rural schools and districts. These circumstances had also elevated the need for a workable set of solutions that could then be implemented through USS teams.

Externally, groups of legislators representing rural areas in multiple states wanted increased use of College Board services in their school districts. In some cases, it would be helpful to show a strategy specific to rural schools to allay concerns of those rural legislators and school leaders who believed that the College Board's recent revision of its AP U.S. History course was unpatriotic. As I wrote earlier, educators and legislators openly debated whether the College

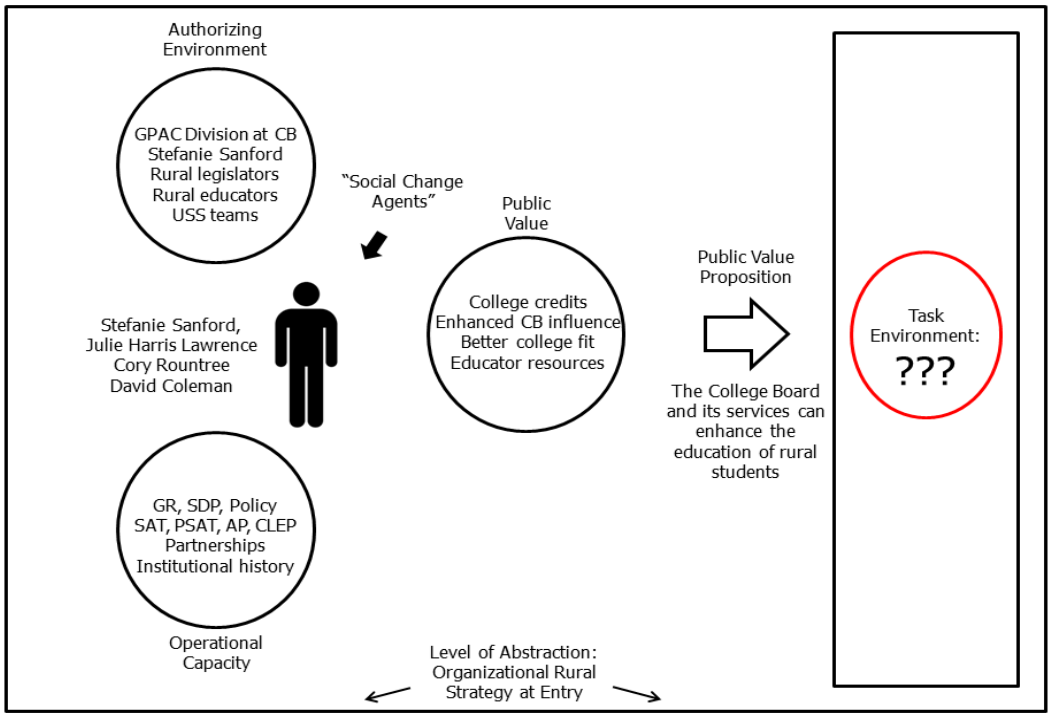
Board should provide curricular guidance to their schools through AP courses or whether AP courses should be outlawed. The authorizing environment, then, included authority for rural work due to internal need as well as external pressure.

Triangle 1: public value*.* Both internally and externally, many people saw opportunities for rural students to enhance their education through scholarships based on PSAT performance, to earn college credit through AP courses or CLEP exams while in high school, or to have SAT scores sent to a greater diversity of colleges aligned to student fit and ability. The College Board's purpose statement, "challenging all students to own their own future," was designed to reflect the new organizational position as a provider of educational opportunity as opposed to a creator of assessments. Finding ways to bring those opportunities to rural schools in an effective, efficient way can further that purpose statement. The organization also hoped to capitalize on the reputational benefits of various new partnerships, including those with Khan Academy, Project Lead the Way, Boys & Girls Clubs, and the My Brother's Keeper initiative. Bringing those possibilities to rural school districts adds to the idea that the College Board provides opportunity.

Triangle 1: task environment*.* When I arrived at the College Board, individuals invested in a potential rural strategy knew that reaching 10 million rural public school students would require differentiation. However, the data systems at the College Board and the vast number of rural school districts made

narrowing the focus difficult. For urban districts, the College Board partners with the Council for Great City Schools (CGCS), an organization representing 68 of the largest school systems throughout the country. Similar organizations for rural schools are few and far between. Even those that do exist cannot coordinate the activity of the more than 7,500 rural school districts in the same way that CGCS works to coordinate 68 districts. While many pieces of the strategic triangle seemed to be in place, the task environment piece, that is, where to execute the strategy, appeared undefined. The RKA provides a segmentation of rural education trends regarding the *how*, but I would not address the *where* until later in my strategic project. Figure 9 shows the College Board's Rural Strategy analyzed though the strategic triangle prior to my arrival in June 2015.

Figure 9: Strategic Triangle 1; Rural Strategy Prior to Residency



Source: Author's design, framework drawn from *Creating Public Value* (2000) and *Recognizing Public Value* (2013) by Dr. Mark H. Moore.

CBRS Phase 1: Interpreting the Project and Plan Creation

My residency altered the value proposition for a rural strategy at the College Board. My former boss, Franklin & Marshall College President Daniel Porterfield, provided my initial introduction to Stefanie Sanford. My access to Porterfield, a Trustee of the College Board, and Sanford, a member of the Executive Leadership Team, elevated the authorizing environment of a rural strategy. In August 2014, Sanford recognized that I could be well-positioned to look at rural engagement at the College Board both within the divisions she oversees as well as partner branches of the organization. I would enter as a doctoral student less beholden to current goals and objective, had taught in public schools, and had been raised by educators in rural Idaho.

The College Board agreed to be a residency site and the Ed.L.D. program approved the organization in September 2015. I agreed to a "Policy Fellow" position in December 2015 and had multiple conversations with Craig Jerald and Wendell Hall prior to my arrival. This led to an initial work plan that Hall and I discussed in detail during the program's May 2015 residency supervisor visit. Our work in these initial sessions, occurring prior to the start of my residency, created a structure for my strategic project. I use the strategic triangle for the second time to analyze a College Board rural strategy's value proposition based on the work plan we developed.

Strategic Triangle 2: CBRS at Residency Entry

Jerald and Hall developed a work plan that positioned Jerald and me as the drivers of rural strategy development, with Hall providing additional capacity as necessary. We looked to collaborate heavily with the full Policy team that worked under Jerald's supervision, along with colleagues in GR, SDP, and AP. Jerald also saw the Research and Data Science teams contributing to the work by providing analysis of statistical and survey data. Collectively, this group comprises the social change agents in this formulation of the triangle.

Triangle 2: operational capacity*.* Jerald hoped to use College Board-specific tools such as AP Potential and the Policy team's State Watch function to build initial analysis. AP Potential shows students who have taken the PSAT their potential in various Advanced Placement courses based on their performance, while the Policy team creates a monthly briefing known as State Watch. It highlights state-specific policies and strategies to be distributed throughout the divisions making up GPAC and SDP.

Additionally, we hoped to understand how partnerships with the career and technical education-focused organization Project Lead the Way and the online learning collaborative edX might be leveraged for rural students. Both of these partnerships were in early stages of development when my residency began. Finally, we hoped to gain information about additional capacity for rural work throughout the organization by creating survey tools that would be distributed to colleagues whose work primarily focuses on state legislatures and

education agencies, local school districts, and state-based advocacy groups. Overall, the operational capacity relied heavily on the assumption that the expansion of AP courses should be the overall goal of rural strategy work. I needed to test that assumption throughout the first two phases of my work. Doing so would allow the executive team to determine whether AP should lead the strategy, as laid out in my theory of action.

Triangle 2: authorizing environment*.* Positioning the project under Craig Jerald, a Vice President at the College Board, elevated the organization's rural strategy work to a higher level than where it had been positioned prior to the residency. Both Stefanie Sanford and David Coleman hoped to see a more intensive and high-touch strategy development process in order to create strategy documents that would be worth sharing throughout the organization and implementable through a piloting process. To understand the way that those in leadership thought about a rural strategy, I had early conversations with each individual shown in the organizational charts provided in the introduction. These one-on-ones collectively indicated the need for a comprehensive strategy aligning College Board capabilities with the desires and needs of rural schools.

Externally, states including Florida, North Carolina, New Mexico, and Colorado expressly wished to increase access to and performance in AP courses in rural areas. States acted on this through policies creating partnerships between the state and the College Board. However, field intelligence gathered through GR and SDP colleagues indicated that rural schools were both struggling

to provide the capacity and support necessary for sustaining AP courses and programs developed through the various policies. This intelligence was coupled with evidence provided by Nat Malkus' January 2016 American Enterprise Institute reports described in the introduction of this paper. Although AP participation continued to grow nationally, rural schools and their stakeholders needed interventions matched to their capabilities.

Triangle 2: public value*.* Within the College Board, the GR and SDP teams making up USS groups could utilize a rural strategy in their plans to expand participation and performance in states key to the organization's overall strategy. Those who had worked on rural strategy previously, including Julie Harris Lawrence, believed that the best way to create a strategy that would stick was to allow someone to focus on strategy development and execution for an extended period of time. The residency experience provided at least a starting point for that opportunity. If we could develop workable ways for rural students to access College Board programs, particularly AP courses, we would have stronger evidence that AP was a driver of educational opportunity for a larger number of students in a larger number of localities.

I also saw a more subtle, but potentially widely beneficial, value proposition in this strategic project. Focusing on smaller schools could help identify valuable ways to deliver AP courses on a smaller scale than has been done traditionally. Whether through virtual education or adjusted educator training, creating a more individualized process for AP instruction in smaller rural

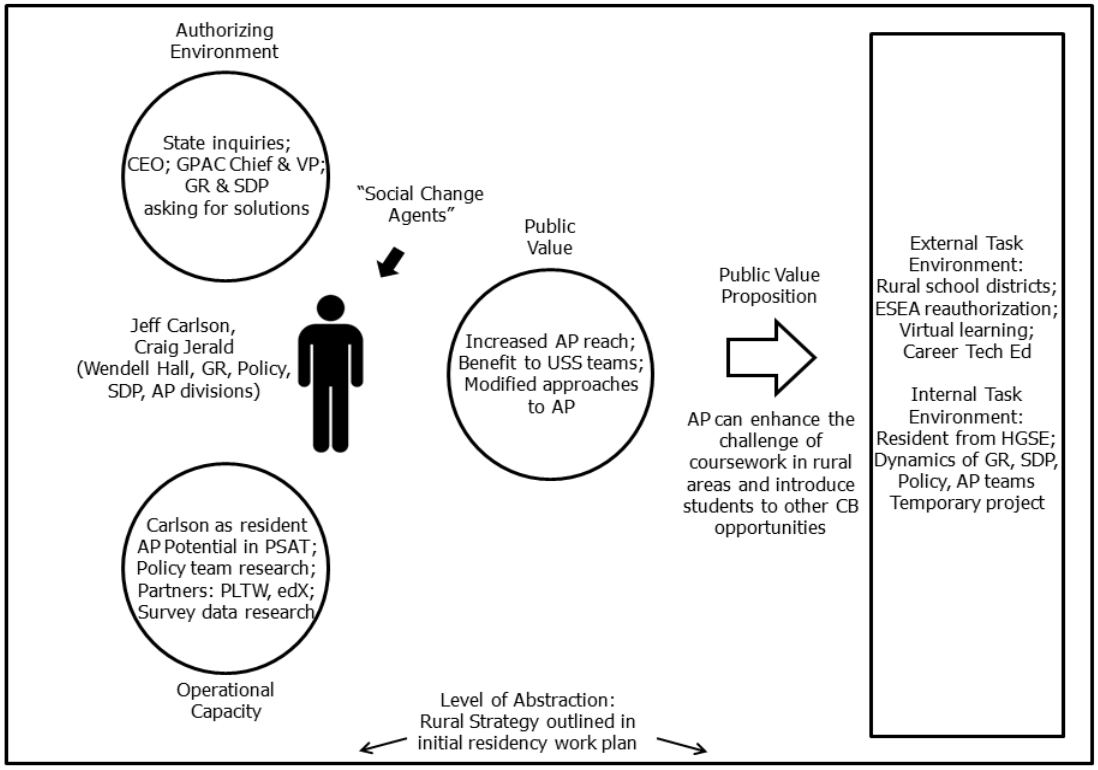
schools and school districts could hopefully be scaled up to other schools who hoped to provide additional ways to access AP courses. Traditionally, a well-prepared group of twenty or so students have attended a course in a traditional classroom space. They and their instructor utilize a large textbook and work together over the course of a semester or full year to engage with content and prepare for AP examinations taking place in May. As I saw the work plan develop, I hoped to better understand how the value of AP courses could be repackaged into instructional delivery methods that differed from traditional offerings. How could individual students, small groups of students, or networks of students and instructors in separate locations access Advanced Placement?

Triangle 2: task environment*.* The strategic triangle also challenges me to define the task environment. In looking beyond the College Board, the research process leading up to my entry as resident had uncovered the vastness of the rural education landscape. As I described in the first strategic triangle diagnosing rural strategy at the College Board before my arrival, this landscape had never been fully defined. Thus, this strategic project would need to lay out parameters including how, when, and where an eventual pilot project could take place—a key difference from strategy work occurring previously. The same early research process led me to focus on how this strategy could intersect with the five areas of focus described in the RKA.

Within the organization, I would be interacting heavily with those divisions described in the Operational Capacity analysis of this triangle. In particular,

Jerald and the organization overall positioned the AP program and its staff as key to the success of the strategic project. I had to understand these colleagues as both key players in the operational success of the strategic project and also individuals who may understand this strategic project as *happening to them*. Those in my task environment, occupying the space and capacity in which I would develop the project, understood me as a temporary "Policy Fellow" from Harvard who may or may not even be around once the residency and capstone document had been completed. I recognized that I needed to create a strong foundation if I hoped to build a successful strategic project, particularly as the structures we had developed for the project may change over the course of the residency. Figure 10 visually represents the evaluation of the initial work plan through the strategic triangle, and Appendix B shows the work plan itself.

Figure 10: Strategic Triangle 2; Strategy at Start of Residency



Source: Author's design, framework drawn from *Creating Public Value* (2000) and *Recognizing Public Value* (2013) by Dr. Mark H. Moore.

CBRS Phase 1: Shift in Authorization

I started my residency on June 1, 2015 at a Council of Chief State Schools Officers rural state summit in Omaha, Nebraska. I felt confident that my new colleagues at the College Board and I had developed a plan that would determine how the College Board could approach rural areas. Almost immediately, however, that plan suffered a disruption. On the first Friday of my residency and second day in office, June 5, Craig Jerald informed me that he would be taking an indefinite leave from the organization by the end of July. Not surprisingly, I spent the weekend pondering how both a rural strategy and my residency itself would develop.

By the following Monday, the daily supervision and support of my residency became Wendell Hall's responsibility. He and I spent June and July discussing which colleague might best be positioned to serve in the high-level supervisory and mentoring roles of the residency. Amidst those discussions, Hall, Jerald, and I determined that biweekly strategy sessions with Stefanie Sanford would both move the work forward and also create time for me to discuss the project with a senior leader in the organization. We waited until the end of July for the first check in with Sanford, following the College Board's Advanced Placement Annual Conference.

The combination of Jerald's departure from the Policy team in the first week of the residency and a two-month period before regular check-ins with Sanford began presented an opportunity to reassess the strategic project. I quickly realized that the organization had weak institutional history or documentation of any past attempts at creating rural work streams, let alone a record of best practices or mistakes to learn from. I spent much of my time in June and July understanding how I should define the rural task environment and engage others throughout the College Board in that work.

CBRS Phase One: Defining Rural and Consolidating Knowledge

I took on two tasks in the first phase of residency: developing a working definition of "rural" at the College Board and investigating past attempts at rural engagement to organize knowledge about previous work. I focused particularly on how Advanced Placement fit into earlier strategies. These tasks grew out of

early discussions with Jerald and Hall that initially placed the work of the residency at the intersection of rural schools and the AP program. GPAC under Sanford and AP under Trevor Packer have seen rural as less likely to develop AP courses for a variety of reasons. These include lower student enrollments that may require less diversification of course offerings, a smaller number of educators able or wishing to be part of the AP teacher community, and potentially a lower desire for AP courses as opposed to dual credit opportunities created in partnership with local universities and community colleges. Multiple senior leaders offered these descriptions of the relationship between AP and rural areas in early conversations. As evidenced by the initial work plan developed in April 2015, however, I was pressed to first define both the actual challenges that may be holding back the expansion of AP in rural areas and also to define what the College Board actually meant when we write about or discuss rural education.

Defining "rural" at the College Board. I did not wish to create a definition of the term "rural" to be used in perpetuity. Instead, my goal was to create a working understanding in order to describe my efforts and move toward a more nuanced understanding of the relationship between the organization and rural communities over the course of the strategic project. As described in my RKA, rural education has broad and varied definitions. Due to the national reach of the College Board, I searched for descriptions of rural education found in federal legislation and administrative bodies, particularly the Departments of

Education and Agriculture, where programs specific to rural areas are administered. Additionally, groups such as the Rural School and Community Trust have developed their own parameters by which to define rural education.

At the first Rural AP Strategy (RAPS) meeting on July 31, I presented Sanford with two principles to guide how we discussed rural education throughout the rest of the strategy formation process. First, I recommended that the College Board use school-level data as the unit of measurement to analyze rural education statistics when possible, but frame the discussions as creating opportunities for individual students, not simply their schools. The second was that the College Board should adopt the National Center for Education Statistics' locale coding and match NCES' definitions of rural students, schools, and districts, particularly throughout our data and research teams.

The unit of analysis for rural education in publications and journals varies between the district or school level, as described in my RKA. This causes different percentages of students by locale code and can set parameters for which schools qualify for federal or state funding programs. These definitions confuse practitioners and policymakers. In an ideal world, the focus of a strategy would simply be higher engagement with communities identifying as rural. In practice, this requires scaling up to school- or district-level data to make comparisons. Data aggregated at the school level gives the most granular picture without compromising individual data privacy. NCES' school-level definitions are widely adopted. As opposed to trying to define and create our own data sets,

those created by NCES produce alignment with most other organizations focused on rural education.

These principles caused little disruption, but the process of implementing them continued throughout the strategic project and will likely be an ongoing process beyond the residency period. The most tangible application of these principles occurred when I worked with the Research division to build a comprehensive data set that sorts national PSAT and AP data by NCES locale code to the school level. This process required a series of meetings and calls throughout the summer and fall and allowed for the presentation of data found in this capstone. Now, my colleagues and I can determine how AP and PSAT are distributed across lines of urbanicity in more nuanced ways than were previously possible.

I began this process in July 2015. The final data documents were scrubbed and fact checked by our research department in January 2016, a six-month process resulting in school-level data presented in this capstone and other policy proposals over the course of the residency. The Policy team can access these data and manipulate them in various ways to create more specific information for future policy proposals, including the aggregation to the district level if needed for specific state requirements. The "data dictionary" showing the types of information available for sorting in this data tool can be found in Appendix C. I consider the creation of this data set a win resulting from my work with colleagues in Research and Policy and likely the most tangible outcome of

the first phase of work. For instance, if a Government Relations Director wanted to know how many rural students earned a score of 3, 4, or 5 on the AP Statistics exam in the state of Michigan in 2015, our data set can find that at the school or district level without needing a weeks or months-long data request process. We can update this data year over year to build policy proposals that take urbanicity trends over time into account.

Prior rural engagement at the College Board. During conversations at the Omaha CCSSO convening on the first day of residency, other attendees claimed déjà vu as they recalled various College Board representatives at conferences in years past. This pattern repeated itself as I introduced myself to internal colleagues and peers at similar organizations. I quickly realized that in order to build a strategy for rural schools and communities in the future, I first needed to catalog prior work and discern what could be learned from the past.

I created a set of six initial categories of rural-focused work to attempt to connect the dots among this work. These came from information collected through a series of 56 in-person, phone, or video-conference interviews, approximately one hour in length each and conducted between June 12 and September 9, 2015. The timing of the first scheduled update with Sanford required that only information gathered by the end of July could be shared. I created a pre-read that rolled up the long-existing and current work to increase rural school AP access and success across the College Board into six distinct categories. I found the first three categories (A, B, and C) to have more intensive

and widespread organizational support in terms of finances, logistics, and operations. The latter three (D, E, and F) described more recent developments where less data existed or provided information on work streams less explicitly associated with rural student impact. For simplicity's sake, I termed these categories our "What We Do" groups.

For each "What We Do," I listed the initial takeaways I had been able to gather up to that point including funding amounts and partner organizations when applicable. The advantages and disadvantages listed reflect my own take after completing initial interviews but did not necessarily reflect the views of the individuals involved in the groups. Finally, I listed contacts for each both for record keeping but also to reflect to those colleagues, Stefanie Sanford, and Wendell Hall that the work was collective.

Table 2: "What We Do" Categories

Category	Key Takeaways	Advantages	Disadvantages	Contacts
A: State-funded AP Partnership (FL, NC, NM)	1) Focus on rural districts through state legislative expenditures 2) Consistency between Debbie Shepard and her team 3) Focus on expansion of traditional brick and mortar AP courses/teachers/PD	Significant state-level funding and ground-level CB presence, only available where districts agree to sign on	Heavy state-level funding and ground-level CB presence, only available to students where districts agree to sign on, some CB colleagues doubt scalability	Brian Barnes, Kathleen Koch, Edwina Henslee, Debbie Shepard
B: State policy or legislation focused toward rural (CO, NV)	1) AP Incentives Program Pilot in CO: ~$250K for 500 students plus PD supports, school supports 2) Current work with NV appropriations through GR and SDP collaboration 3) Miniature version of FL/NC/NM Partnerships	Incents legislative buy-in at lower price point than full partnership model, particular rural focus	Small scale to date, may prove difficult to report impactful results, mainly accomplished through Whitney's individual skillset	Terry Whitney, Scott Hill, Matt Wagner, Steve McCue

Category	Key Takeaways	Advantages	Disadvantages	Contacts
C: Virtual AP (NY, virtual)	1) NYS RttT funding: $20M into creation of differentiated virtual AP courses 2) RFP funding through rural district collaboration provides strong model for replication 3) SUNY-Binghamton collecting outcome data for first 2 years; sharing results w/CB colleagues and USED through RttT	State/district-level buy-in, differentiation through RFP process, external validators, heavy dose of funding from federal government, creation of courses available online for broader adoption	Model currently held by one state, future federal funding unlikely, more info needed re: strengths/ weaknesses of model	Fernanda Meier, Matt Zarro, Anuska Paul & Pam Sandoval (SUNY-Binghamton)
D: SEA service center outreach (TX, PA, NY)	1) Based on close-to-the-ground relationships between SDP and school/district leaders 2) SEA-sponsored service centers have potential to create scale for rural students	Builds on existing SEA capability already present in many states, incents SEA buy-in, lower costs (financial and personnel)	Less documentation, based in freelance partnerships, relies on strong, widespread school-level and district-level support and leadership	Matt Zarro, Steve Zori, Debbie Shepard, Julie Harris Lawrence, Erin Jones
E: NMSI STEM partnership (KY, TX, ND, Southern states)	1) NMSI/CB work has strong promise for AP STEM focus 2) Range of partnership levels: full state takeover in KY to brand new work in ND 3) Long history; positive implications for impact	Partnership with NMSI, leveraged appropriations over multiple legislative sessions, STEM focus	Relationship with NMSI has developed differently by state, lower CB control of model, may be difficult to expand course offerings outside STEM	Jeff Peterson, Asenith Dixon, Raphael Curtis
F: Davidson Next and edX (NC, SC, virtual)	1) Focused on Calculus, Physics, and Macro based on CB and school-level data 2) Garnering attention due recent release of materials to anyone via edX 3) <40 teachers in NC and SC for pilot; Davidson studying years 1 and 2	External partners in Davidson and edX, targeted to specific educator and student need based on prior cohort data, external data validators, STEM	Small pilot, potential lack of version control w/edX, based on the premise that a school or teacher already offers the course	Kathleen Koch, Julie Goff, Kirsten Johnson, John Hansen (HGSE)

At that first RAPS meeting, I received approval to spend the next few months investigating in greater depth a consolidated set of no more than four categories. I would interview colleagues involved in the work and determine what best practices, outcomes, missteps, and learnings had come out of this work. I planned to determine the four "pathways" by the end of August. This investigation would provide the background justification for the development of an enterprise-wide rural strategy by the end of the residency. Investigating those

pathways makes up the bulk of the second phase of my residency described in the next part of the capstone.

Engaging with USS teams. I also left the first meeting with soft authorization to engage with Unified State Strategies teams in a proactive manner rather than simply responding to whichever teams reached out to me. USS teams are state-specific groupings of College Board colleagues who meet with varying regularity to discuss ongoing work and current policy proposals relevant to an individual state, particularly within the first column of states shown as Group A in Table 3. This group, in general, contains those states with the largest student populations and many of them have assessment delivery contracts with the College Board.

Table 3: State Groupings

Group A	Group B	Group C
California	Alabama	Iowa
Florida	Alaska	Kansas
Georgia	Arizona	Mississippi
Illinois	Arkansas	Missouri
Indiana	Colorado*	Montana
Maryland	Connecticut	Nebraska
Massachusetts	Delaware	North Dakota
Michigan	Hawaii	South Dakota
New Jersey	Idaho	Tennessee*
New York	Kentucky	Utah
North Carolina	Louisiana	Wisconsin
Ohio	Maine	Wyoming
Pennsylvania	Minnesota	
Texas	Nevada	
Virginia	New Hampshire	
Washington	New Mexico	
	Oklahoma	
	Oregon	
	Rhode Island	
	South Carolina	
	Vermont	
	West Virginia	

* CO will likely move from Group B to Group A, TN from Group C to Group B in the near future.

From a practical perspective, I needed to both find champions for the work while also not spreading myself too thin. I used the same initial conversations that had led to the creation of rural work categories to build four scenarios that could help focus the work on specific states. I built out four scenarios to move forward, and grouped states where I saw similar relationships to the College Board and access and participation within Advanced Placement. Hall, Sanford, and I decided to move forward with Scenarios 1 and 2 of the four shown in Table 4.

Table 4: Pilot Development Scenarios

Scenario 1: Focus rural strategy in large Group A states; match suburban and urban success to rural success (e.g. NY, CA, TX, FL, MD).	**Scenario 2**: Focus rural strategy to Group B states with overall low AP participation and performance (e.g. AK, ID, NM, LA, OK).
Next steps ○ Create rural student data sets across Group A and B states with strong Group A states receiving highest attention. ○ Gauge whether rural solutions connect with colleagues and stakeholders working in this set of states.	Next steps ○ Create rural student data sets across Group A and B states with "stuck" states receiving highest attention. ○ Focus on aspects of stuck states such as Native American population, comparisons of states with/without statewide credit policies or SAT contracts, etc. ○ Find interested stakeholders in these states.
Scenario 3: Expand model of state-funded AP expansion grants (e.g. CO, NV).	**Scenario 4:** Focus rural strategy based on willing partners (PLTW, 4H, edX, philanthropies).
Next steps ○ Find friendly legislatures with GR and SDP. ○ Catalog best practices and pitfalls with Research and CO/NV SEAs.	Next steps ○ Gauge interest among external stakeholder groups. ○ Investigate ongoing CB/PLTW collaborations in CO and PA. ○ Gather and vet potential new partners (4H, CTE orgs, HS sports associations).

Focusing on large Group A states in the first scenario provided me the opportunity to talk about ongoing rural strategy work with colleagues assigned to states that are important to the College Board's larger success, particularly

California, Texas, and Florida. Expanding the reach of our programs to students residing in states that already have a large presence fit into the cultural understanding at the College Board that as go California, Texas, and Florida, so goes our overall strategy. I was able to set up calls and interviews with colleagues in all three of these states, which put rural engagement on their radar.

The second scenario allowed me to explore how rural engagement could work in states where both my colleagues and external stakeholders saw the College Board as less influential. Frankly, the stakes were lower in these states and any success in creating opportunities in states such as Alaska and Idaho could be spun as a quick win while also not stepping on the toes of established colleagues and strategies in more populous Group A states.

The first four CBRS meetings in July and August marked a pivotal point in the strategic project and my residency. We agreed on how to define the term rural and how to operationalize it throughout the organization. I had authorization to intentionally investigate four "rural pathways" at work in the organization. Additionally, I would pursue the first and second scenarios for engagement with state teams. This combination of decisions provided a guide for my thinking about how to develop the rural strategy overall. I was able to focus on specific states and four streams of ongoing work that would connect me to USS teams and, in particular, the GPAC and SDP divisions.

This phase also connected me to the Policy and Data Research teams and eventually resulted in a data set that provided enhanced capability to policy proposals. Explicitly, it forced the research teams to cut PSAT and AP data by locale code in a comprehensive way. Usually that team simply responds to requests for specific data about a group of students participating in a particular subject in a particular state or region. We were able to discuss what rural participation looked like more holistically. This process also allowed me to be seen as a competent colleague by those who build data decks and policy proposals. My status as a policy fellow created a negative influence in early conversations with many College Board colleagues. I perceived that some thought, "Here comes another person wanting to do something with rural schools again." With research colleagues, however, the fact that a Policy Fellow would dig into NCES codes and attend the NCES data conference in July showed that I was interested in the level of specificity and nuance they see as beneficial in their work.

CBRS Phase Two: Case Studies and Building Alliances

Following the first RAPS meeting with Stefanie Sanford and Wendell Hall, I embarked on a set of approximately thirty-five hour-long interviews, including follow up discussions with some individuals I had spoken to early in the summer. I selected interviewees after having consolidated the six categories of rural work outlined in phase one of the project into what I coined four "rural pathways." At the end of August, I presented initial information about each pathway to Sanford and Hall at a higher level of detail than at the end of July. I determined that I would need to travel to at least Florida, North Carolina, Colorado, New York, and Texas in order to learn more about the work of the pathways on the ground and to establish credibility with those doing the work every day. I also listed questions I continued to have about each pathway.

Table 5: Rural Pathways

Pathway	Description	Case Study Target	Related States & Work	Pathway-Specific Questions
Pathway A: AP Partnership	Based on district ID/buy-in, CB provides service and support, PD, assessments, and data analysis to target districts over sustained periods of time. Operational in 3 states (NC: AP focus). ○ **Takeaway**: school visits, workshops, fee subsidies.	Florida, North Carolina: Partnership Tennessee: Partnership Discussions	○ NM Partnership ○ Philanthropy	○ What policy conditions are necessary? ○ What are the strongest contract deliverables? ○ What changed after rural focus? ○ What states are primed to take on the partnership pathway? ○ What additional tools are necessary for greater success?

Pathway	Description	Case Study Target	Related States & Work	Pathway-Specific Questions
Pathway B: Focused State Funding	Tailored solutions brought out of SEAs or state legislation/statute w/fewer CB-provided support structures than those seen in Pathway A. Most prominent area: NMSI partnerships. ○ **Takeaway**: NMSI, pilot programs, budget lines	Colorado: AP Incentives Pilot Program	○ NMSI Partnerships ○ Nevada 2015 legislation ○ State-funded AP Virtual Content Development	○ How did legislative relationships develop? ○ How have pilots moved to scale? ○ What could CB have done to increase efficacy or efficiency? ○ What states are primed to take on the focused funding pathway?
Pathway C: AP Virtual Delivery	At its best, provides AP courses online at no charge, taught by certified teachers with AP content area and online education backgrounds—many times supported by state funds. ○ **Takeaway**: scattered approaches to online AP content delivery, rarely working in tandem w/CB, little data on quality	New York: NYSED VAP Program Maine: AP4ALL	○ State-funded AP Virtual Content Development ○ Davidson Next ○ State-backed Virtual Schools (i.e. FL, PA)	○ What data do we have to inform current student behavior re: AP virtual delivery? ○ What additional data might we collect? ○ Where are SEAs, districts at schools w/regard to technological capabilities? ○ How does AP virtual delivery interact w/dual enrollment?
Pathway D: Educational Service Agency (ESA) Collabs	Treats ESAs as liaisons to rural districts, in effect summing up small, rural districts into more manageable partners via ESA staff and resources ○ **Takeaway**: Districts grouped into larger entities; economies of scale	Texas: Rural Initiatives USS Strategy	○ PA NW rural collaborative ○ Ohio Appalachian Collaborative ○ NY BOCES ○ CA LCFF & LCAP	○ Does engagement begin w/SEAs or CB? ○ What states are primed to take on the ESA Collaboration pathway? ○ Which states orient ESAs toward rural districts?

Throughout August, I worked with a team of twenty colleagues within four divisions at the College Board to develop twelve questions in an effort to both solidify larger buy-in for the project and also capitalize on the institutional knowledge present within the organization. I collected responses to this set of standard questions that I designed to align to a particular point on the public value triangle described in the RKA. I decided on the questions through the same feedback process with twenty colleagues, and asked the questions in the same order to provide consistency in the process. While part of this seemed necessary

in order to build data for the capstone process, the deliberate approach I took over the course of August built up an ongoing dialogue with my colleagues that continued to inform my understanding of the pathways themselves as well as the work of those in GR, SDP, and AP. Table 6 shows the twelve standard questions and the corresponding vertex of the strategic triangle.

Table 6: Case Study Interview Questions

Question	Public Value Category(s)
In what ways is this pathway important? What makes it valuable?	Public Value
Would you choose this particular pathway if you wanted to increase AP access and success for students?	Public Value
If you could start this pathway from scratch, what would you do?	Operational Capacity
What have the outcomes/results looked like for this pathway?	Operational Capacity Public Value
Who makes this pathway happen?	Operational Capacity
What would this pathway look like at its very best?	Operational Capacity
How is this pathway funded?	Operational Capacity
What has been the most difficult piece of this pathway?	Operational Capacity
How did this pathway come about?	Legitimacy and Support
Was this pathway built over time or did it occur at an inflection point?	Legitimacy and Support
Are there obstacles or challenges that hold this pathway back?	Legitimacy and Support Public Value
Who believes this work to be important? How do you know?	Legitimacy and Support Public Value

Getting to know my colleagues provided enormous benefit. I was able to share my history as a graduate from a small rural high school who also understood that it simply took a lot of time and effort to reach rural districts for the potential market return. I deliberately told people that I knew outreach to rural students was not everyone's highest priority but that I wanted to make it mine. As a result, between the last week of July and the middle of December I received invitations to and attended eight conferences or state-specific meetings

related to the pathways, including at least one visit to each focus state listed in the rural pathways table above. Through these visits and thirty-five interviews using the questions above, I further developed both trust and knowledge from my colleagues and a more nuanced understanding of the operational capacity of the College Board.

From September through early November, colleagues in AP and SDP provided great insight and were the source of the majority of invitations I received to learn about the pathways in person. Edward Biedermann and his team in AP Outreach and the SDP Chiefs—those tasked with heading geographically distributed regional offices—added to the quality, accuracy, and depth of the effort to catalog what had been happening in each of chosen rural pathways.

Takeaways from Pathway Investigations

I learned four key things from conducting interviews and traveling to conferences, district meetings, and regional College Board offices:

1. Prior rural strategy work has been ad hoc. Past efforts came about because of policy inflection points or personal relationships in specific states.
2. The organization has difficulty collecting student-level data or rural school results from any particular pathway because we have rarely sorted data and results by urbanicity—particularly in how we report AP results. Tracking progress with data has been difficult due to data privacy

concerns at the individual, school, district, and state level. Further, nuanced differences in definitions of urbanicity make it hard to make causal or correlational inferences.

3. The SDP team bears the implementation work for any strategies aimed at increasing participation or performance. Engaging rural schools and districts seems counterintuitive to their numbers-driven strategic goals—particularly in reaching "top 250 districts."
4. The College Board should develop small-scale, rural-specific pilots designed more to build rural interaction with CB products and services than to specifically increase access and performance in AP. Leading with AP only allows us to think in the ways AP traditionally operates. We need to lead with rural.

Results from phase two*.* I incorporated what I learned from studying the four rural pathways as I developed a pilot proposal from November to January. First, I wanted to build a way to determine which states would be best for a pilot project while also responding to opportunities that may present themselves. I would need to be able to articulate specific data points for the number of students, schools, or districts the project planned to impact, and I would need to describe that impact in ways that would tie into the goals and strategies currently at play in GPAC and SDP. I also knew that I would need to align the goals of the pilot project to the region and state-level goals of SDP in order to build buy-in with those in senior director and director-level positions in

the targeted states or regions. The idea that building a strategy for rural students as opposed to an Advanced Placement or virtual learning strategy that could be piloted stands out as a result from this phase. Moving into the third phase of the strategic project, I started describing my work in terms of how best to match the opportunities and needs of rural communities instead of figuring out how to expand AP in rural areas.

CBRS Phase Three: Pilot Project Development

The second and third pieces of my strategic project overlapped somewhat. While I was conducting interviews and traveling to various states in order to learn about what had come before, I led biweekly strategy sessions to build the case for a College Board Rural Strategy (CBRS). I spent my time in the Washington Office developing a series of documents sent to Stefanie Sanford prior to the strategy sessions. These pre-reads provided the structure for our strategy discussions and also provided digestible evidence of my strategy formation over the course of the fall and winter.

Determining initial targets*.* A key piece in determining the task environment for CBRS was the choice to focus on a strategy design that could be executed at the state level. By the end of August, the state became the level of analysis in pre-read documents for the CBRS meetings. Our discussion focused more on how to operate statewide instead of groups of rural districts or ruralized regions of the country. This could be done through the Unified State Strategy structure and through partnership with state education agencies and state-operated education service agencies (ESAs). Adopting this norm aligned with how GPAC discusses policy choices overall through efforts including monthly State Watch updates and USS teams.

Putting this norm into practice, I targeted two sets of states for work beyond the "rural pathway" interviews as shown in Table 7 on page 84. For the

fall, I intended to work with Group A states with large numbers students, both rural and overall. This ranged from Texas with over 50,000 rural students to Pennsylvania with just under 25,000. I provided targeted support to these states as needed through existing structures such as USS calls and updates with the rest of the Policy team.

In practice, this meant that I joined USS calls for the states listed below and set up calls with the teams based in each state to describe the scope and sequence of my residency. While work in these states had less to do with planning a pilot, it kept my work relevant in the eyes of SDP, GR, Policy, and AP colleagues. I developed the table below to build the case that rural students should matter to colleagues working with these Group A states. In North Carolina, for instance, over 40% of all high schools are rural schools—schools in areas with fewer than 2,500 residents. If the team focused on North Carolina wants to increase the AP participation rate across the state, students in that 40% of high schools will need to be engaged. The table lists the number of rural public schools students in each state, the number of rural schools serving grades 9-12 and their percentage in relation to all schools serving grades 9-12, the state's rural school AP participation rate, and the state's rank for rural school participation across the United States. Finally, I listed specific items about each state that focused the need for potential rural strategies.

Table 7: Group A States for Fall 2015 Support

State	2014 Cohort # Rural Students	# Rural 9-12 Schools AY12-13	% Rural of all 9-12 Schools AY12-13	2014 Cohort AP Rural Part %	2014 Cohort Rank Rural Part	Descriptive Factors
TX	56,473	802	36.22	25.6	18	Lt. Gov. interest, AP Credit bill
CA	26,533	380	14.19	27.1	16	WRO interest, CCSS/SEA interest
NY	26,648	307	22.83	27.3	15	BOCES, # of rural students in otherwise "urban" state
PA	24,638	214	28.34	16.8	33	Service Center networks, Gov. and CCSS interest
MI	27,829	425	35.93	18.9	29	New statewide contracts, legislative interest in CB
NC	36,075	262	41.99	24.7	20	NC AP Partnership, # of students vs. PA
OH	25,451	302	31.86	19.1	28	AP credit policy, legislative interest in CB
Total/ Average	643,508	8,618	34.30	22.4	N/A	

The second set of states had been designated as "stuck" states with regard to Advanced Placement participation and success rates through analysis done by my colleagues in the Policy division. These states had grown in AP participation by less than 5% and AP success by less than 3% in the last decade. Additionally, as opposed to the Group A states shown above, the College Board approached work in these states with less formality.

Here I would have the opportunity to build new structures for a pilot with my colleagues instead of matching my work to existing strategies. I could choose to implement a pilot in these states with lower stakes due to the less established presence of AP and other College Board assessments. The rows of this table are similar to the Group A target table above, but also include the state's overall percentages for participation and performance in the 2014 AP examination. AP defines participation with the numerator as the number of students who take at

least one exam and the denominator defined as all students enrolled in the state. Performance percentages are calculated similarly, with the numerator changed to those students who earned at least one score of 3, 4, or 5 on an exam. Similar to the table above, the spring planning target table lists individual factors that could have implications for a rural strategy.

Table 8: Spring Planning Pilot Targets

State	2014 Cohort # Rural Students	# Rural 9-12 Schools AY12-13	% Rural of all 9-12 Schools AY12-13	2014 Cohort AP Rural Part %	2014 Cohort State Rank Rural Part	2014 11^{th}/ 12^{th} Part Rate %	2014 11^{th}/ 12^{th} Perf Rate %	Descriptive Factors
AK	2,684	209	76.28	10.2	44	13.0	8.0	AI/AN pop, SAT contract
ID	4,800	106	45.89	7.7	48	11.1	7.5	SAT/PN contract, leg interest, new CCSS
LA	10,361	165	44.12	15.1	35	13.6	4.1	Strong state credit & incentive policies
NM	6,047	87	39.73	24.9	19	15.2	6.6	NM Partnership, PN contract, AI/AN pop
OK	12,694	337	67.67	12.4	40	14.5	7.3	AI/AN pop, overall pop, new CCSS
Total/ Avg.	643,508	8,618	34.30	22.4	N/A	21.9	13.2	

Transition beyond Advanced Placement

Throughout the first three months of my residency, I found it difficult to determine which of three potential outcomes would be seen as most successful by executive leaders at the College Board. The first would be the development of a strategy that harnessed virtual learning to bring Advanced Placement specifically to rural students—the key piece being virtual learning as the driving force. The second would be a strategy focused on bringing the traditional model of Advanced Placement to rural schools through policy changes, new partnerships, and winning rural hearts and minds over to build support for AP. A

third strategy outcome could be increasing the visibility of the College Board in rural communities in ways that may or may not position AP courses as the driving force.

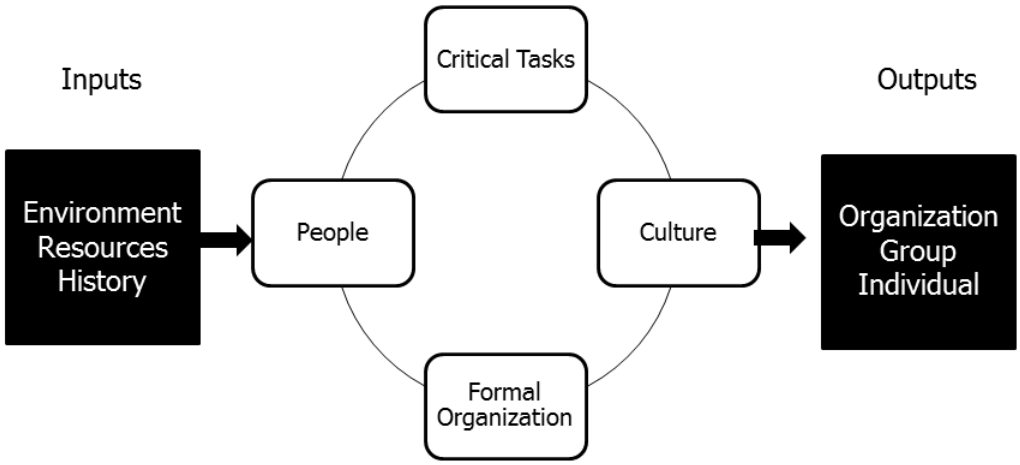
By mid-September, two opinions on the role of virtual learning and Advanced Placement emerged from the general informational interviews from June to August and the rural pathway interviews from August to November. On one hand, many individuals wished to pursue digital learning in order to expand the accessibility of AP course delivery. This camp included senior leaders and large numbers of colleagues in SDP and GR, as well as colleagues at state departments of education. The other camp held the belief that virtual learning solutions for Advanced Placement should be pursued with caution in order to provide students with as successful an AP experience as possible. Further, the cautious camp saw this work as tightly held within AP. This camp included every individual I spoke to within the AP division and a few colleagues within SDP. From a high level, opinions on whether virtual learning was a solid opportunity for AP's immediate future was broken down by how close you were to AP experientially and on the organization chart. Those further from AP were more likely to want to explore blended learning, whereas almost uniformly those with much of their work or experience relating to AP were more hesitant.

Ambidextrous organizations. Wendell Hall and I presented the ambidextrous organization framework to Stefanie Sanford during a strategy session on October 8, 2015, as a way to think about AP within a rural strategy.

This conversation stemmed from a lecture describing the framework given by Professor Michael Tushman at the first residency return campus visit in September 2015.

In Tushman's *Winning Through Innovation*, he and his co-author write that organizations look to build growth by creating congruence, or fit, between four key levers: people, critical tasks, culture, and formal organization. These levers are impacted by various inputs, including the environment, resources, and history available to the organization. These levers also produce outputs that impact individuals, groups, and the organization itself. If your strategy fits what you need to accomplish, you have the right people in the right places, and they get along well enough to get the work done, you have congruence. This is known as the "congruence model," developed by Tushman and his colleage David Nadler (Nadler & Tushman, 1980; Tushman & O'Reilly, 2002). If one wants to understand where an organization might have strengths and weaknesses, she or he can test how the people, the critical tasks, the culture, or the organizational structures work toward or against the goals and objectives of the organization.

Figure 11: Congruence Model



Source: Author's design, derived from *Winning Through Innovation* (2002) by Profs. Michael L. Tushman and Charles A. O'Reilley.

As Hall and I discussed Professor Tushman's session during the first return campus visit, I viewed AP through an academic lens based on the model above and saw the division as a group with very strong congruence. This tight fit among the people working within AP, the organizational structures and culture embedded in the work, and the work itself led to a strong product that had grown year after year due to a strong model for congruence. Tushman argues that, inevitably, periods of revolutionary change force organizations to blow up their congruence and build it again in new ways if they wish to continue over time. Organizations that accomplish this proactively earn the title "ambidextrous organizations."

Tushman and O'Reilly write that to win through innovation, executives must be able to manage contradictions and manage change. In addition, Tushman explained during the return campus visit that ambidextrous

organizations must simultaneously exploit the products that spin out of existing strong, congruent organizational structures while they explore new products that currently have no such congruence because they are still in development.

I saw this as an opportunity to describe what many colleagues had lifted as a dichotomy in trying to bring AP to rural schools. It seemed unwise to push AP, as traditionally produced, to immediately attempt scale in rural schools. Quick scaling led individuals either toward the idea that AP should change to enter rural markets—change being antithetical to strong, congruent organizations—or toward a conception that rural schools needed to fix some things to allow AP to enter in. For much of the first half of my residency, colleagues suggested making policy changes that would give schools startup grants to purchase materials and provide professional development or investments from foundations that would pay rural AP teachers more. Most often mentioned by those outside of AP Program was providing virtual AP to rural classrooms. Virtual AP seemed like a non-starter based on the current capacities and interests within AP, and I had not been convinced that startup grants or more pay would produce strong rural AP programs. We had no evidence of that strategy being successful thus far.

Tushman's framework for how to hold exploitation and exploration within an organization delivered the final piece of the puzzle. He argues that an executive cannot ask a highly congruent team responsible for exploiting a strong product to simultaneously explore new paths. Asking the AP division itself to

focus attention to a rural strategy distracts from that congruence. The work must be held separate or the exploration inevitably looks like slightly different versions of the current product—institutional isomorphism at its strongest (Tushman, Smith, & Binns, 2011).

After discussing the framework, Sanford and I agreed that, to borrow from Tushman's terminology, my particular pilot *exploration* for rural schools should in some ways be held separate from ongoing work to *exploit* AP. This session provided the clearest evidence yet that the goal of the residency was to explore innovative strategies for rural schools that could include—but were not limited to—AP and/or blended learning as components of that strategy. At the end of this session, I was more confident than at any prior point about Sanford's goals for the residency.

The pilot needed to meet rural schools and their leaders in ways that could foster partnership. Advanced Placement would be part of the "solution," but I would focus on helping rural schools and administrators access a variety of potential tools available to them through the College Board. This transition allowed us to think about a wider diversity of possible policy or assessment opportunities for rural schools as opposed to grounding our thinking completely within the frame of AP.

By November, I focused on the development of a College Board Rural Strategy (CBRS) Pilot as opposed to a Rural Advanced Placement Strategy (RAPS). This was both a semantic and substantive change. The following

strategy sessions drove to particular data points, to choices, and to deeper levels of conversation than before. Additionally, I made a turn in my relationship to the project. Before November I found myself learning more every day about the organization, but had for a variety of reasons had been unable to determine whether I believed the College Board was prepared, primed, or positioned to challenge rural students to reach higher levels of college and career success.

In making the choice to explore a pilot project focused beyond Advanced Placement, I found myself more driven and excited about the possibility for collaboration between my organization and schools similar to the one from which I graduated. I could believe in new, exploratory work informed by past experience and expertise but not beholden to it. The following questions framed the pilot project's development and helped clarify the operational capacity, authorizing environment, public value proposition, and task environment necessary for a rural strategy to resonate at the College Board:

1. With whom should we **partner** to reach high-achieving, high-potential rural high school students?
2. How should we build stronger **pipelines** to rural schools and their students?
3. In the long-term, how should various **program** divisions work to increase the value of secondary and postsecondary opportunities for rural high schools students?

College Board Rural Strategy Pilot

The concept of partners, pipelines, and programmatic opportunities provided the framework for a series of discussions with internal and external colleagues as well as four additional CBRS strategy sessions that fleshed out a College Board Rural Strategy Pilot proposal by the beginning of 2016. As seen in Appendix D, I recommended that the College Board pursue a pilot focused on rural school districts in Colorado and Idaho with implementation to begin in the summer of 2016. Both states have large numbers of small, rural districts, similar economic and geographic characteristics in those districts, and have rural-focused staff in their state departments of education. Idaho passed legislation to pay for all students to take the PSAT and SAT back in 2011. Colorado's state education agency chose to provide the SAT to all students in December 2015 in the middle of our conversations about rural strategy.

These states chose to partner with the College Board, and it made sense to reach the small rural districts in these states with the same resources and support we provide to the larger, more urban districts in the states. I also chose Colorado and Idaho because they continue to gain attention at the College Board without having long-lasting institutional ties within the organization—allowing the pilot to capitalize on current white space in how the College Board provides support through statewide contracts.

This strategy sought to align to two of the four organization-wide "enterprise goals" to create buy-in throughout the College Board. The two

specific goals are: 1) Propel all students toward college and career success by removing barriers and helping them own their choices; and 2) Reach all students by delivering at scale and ensuring acceptance of and engagement in our work. In order to reach and propel rural students in Colorado and Idaho, the pilot consists of six specific objectives, listed below and expanded upon in the next few pages:

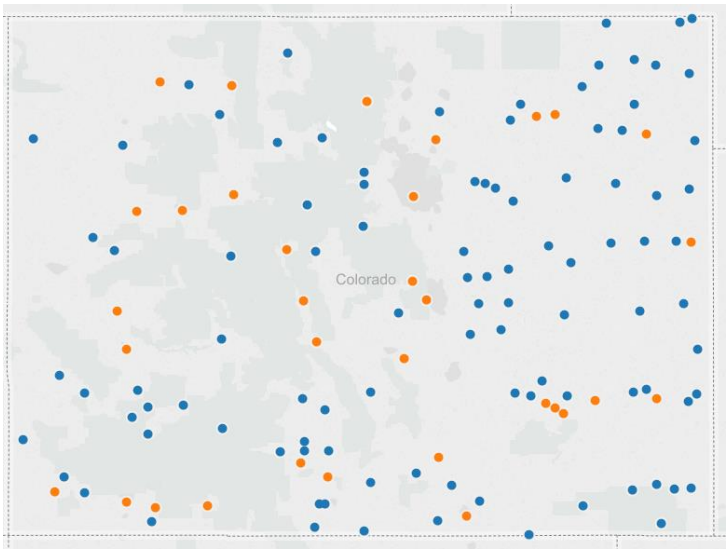
- Partner with well-established career and technical education organizations.
- Utilize already existing rural consortia and virtual distance learning infrastructure.
- Capitalize on Khan Academy, code.org, and other partnerships to increase relevance and participation in College Board offerings, including PSAT, SAT, and CLEP.
- Identify rural low-income, high-achieving students by working with state departments of education and other entities.
- Enhance the quality and value of existing early college and career opportunities by expanding options for credit and reducing financial and geographic access barriers.
- Support school and community professionals who provide college and career counseling in rural schools.

Strategies to increase reach*.* Three of the six strategies align to the College Board's enterprise goal to reach consistently larger numbers of students and schools. According to NCES statistics, there are approximately 100,000

students in rural school districts in Colorado and Idaho. The first reach strategy seeks to reach many of these students by creating new partnerships with career and technical education organizations. Specifically, College Board would distribute information through its Access to Opportunity division to students and educators through career and technical student organizations (CTSOs) and 4H programs, present at conference venues, and reach students through their educator advisors. The two states count over 40,000 CTSO members based in high school and college chapters along with over 165,000 4H members coordinated through agricultural extension offices.

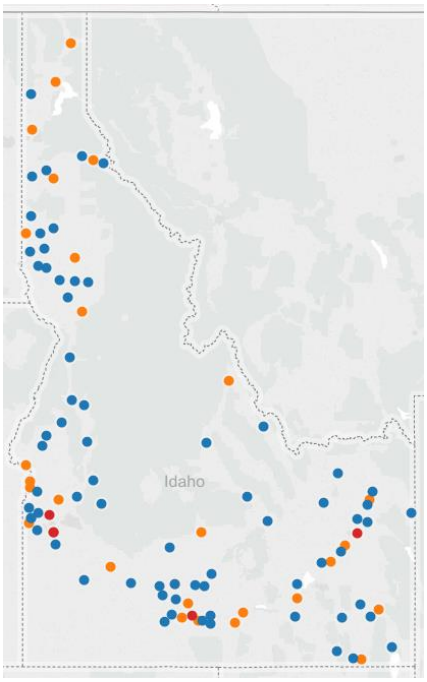
The Colorado Rural Education Council in Colorado, rural education centers under development in Idaho, and virtual distance learning infrastructure available to schools in both states create a pipeline to reach students and educators. As I came to understand state education agency interaction with rural districts, Colorado and Idaho both stood out as having systems and legislative code in place that defines rural districts and provides support structures from the state. As of the last published district lists, Colorado defines 149 districts as rural while Idaho lists 113. While structured differently, both definitions include measures that expand the notion of a rural district beyond the parameters laid out by NCES. Working in states that have developed their own understanding or ruralicity in their context makes a stronger value proposition for the College Board to enter. Figures 12A and 12B show Colorado and Idaho's rural schools districts as designated by NCES and the respective state.

Figure 12A: Rural Designations for Colorado School Districts



Districts classified as rural by CO & NCES: blue
Districts classified as rural by CO & non-rural by NCES: orange
Source: College Board Internal School and District Database (see Appendix C)

Figure 12B: Rural Designations for Idaho School Districts



Districts classified as rural by ID & NCES: blue
Districts classified as rural by ID & non-rural by NCES: orange
Districts classified as non-rural by ID & rural by NCES: red
Source: College Board Internal School and District Database (see Appendix C)

The College Board's recent partnerships with Khan Academy and code.org provide free, Silicon Valley-backed resources to students and schools. If the rural school district administrators see the College Board as a conduit to partnerships such as these, they will understand benefits existing through the statewide assessment contracts that were previously unavailable when Colorado and Idaho predominantly used the ACT exam for college readiness. The rural strategy seeks to enroll rural students in Khan Academy practice following an initial PSAT, similarly to how colleagues in the Access to Opportunity and state and district partnership teams work in large, urban districts. Additionally, Khan Academy has an already existing partnership with approximately 50 schools in 35 districts across the state of Idaho, which means that many educators and administrators already have experience with Khan.

Strategies to propel rural students. The remaining pilot strategy objectives focus on the College Board's propel goals—to remove barriers and create college and career choices. The pilot seeks to identify high-performing rural students through the statewide PSAT contract and connect those students to possibilities for course credit. For students with Advanced Placement programs, the College Board's AP Potential tool can direct students to courses where they can find success. In other schools, students will be able to access information about CTSO leadership opportunities and course credit through our CLEP assessments. Overall, the goal would be to increase the number of

students participating and succeeding in advanced coursework opportunities—particularly through AP, CLEP, and CTE courses.

The College Board can also enhance the value and quality of existing early college opportunities in Colorado and Idaho. For instance, CLEP exams could be used to provide an external validation for the strength of dual credit programs. The pilot seeks to expand the number of low-income rural students who access fee waivers available through the College Board. And, through work currently underway at the organization, students and educators will be able to access online content modules through the edX platform that will align to a variety of CLEP assessments.

Finally, the College Board can bring its extensive experience and partner base to rural school counselors and community-based organizations tasked with providing postsecondary options to students. The pilot will enhance partnerships and resources to counselors through each state's school counselor association by explicitly connecting with rural school districts. The organization can provide information about FAFSA completion or counseling capacity through networks such as the College Advising Corps. The two-page description of the pilot included as Appendix D expands further on the specific steps necessary to implement the pilot strategy in Colorado and Idaho.

Phase three strategy development*.* Overall, this phase of the project was not shared as widely throughout the organization than the work in phases one and two. This occurred for three reasons. The first is that, for most of the

fall, I felt as though this strategy development exercise may be more of an intellectual exercise in how to approach strategy development at the College Board as opposed to a fully legitimate attempt to search for better ways to engage rural schools. My position was temporary and came with no authority and I had learned that others had attempted similar work with less to show for it than they or their supervisors would have wanted. I wondered whether this work would find relevance given competing priorities, a change in leadership in the specific department I worked in, and the reality that the residency contract sets up an interaction that rightly or wrongly tends to allow for a ten-month proof period.

The second reason is that I transitioned the project from a focus on Advanced Placement in rural schools to a set of actions focused not on AP but instead on career-technical education programs, our partnership with Khan Academy, existing networks that engage dual credit programs, and our PSAT, SAT, and CLEP programs to go along with AP programs that currently exist in some rural schools. The strong majority of my time spent early in residency learning about how AP works across the organization and in rural areas convinced me that we should not focus solely on AP as the centerpiece of the effort. Conversations with Sanford and CEO David Coleman in early November solidified and authorized this shift in focus even as I continued to work with the teams in AP and other divisions to develop state-based plans for AP expansion in Tennessee, Louisiana, and Texas—beginning an attempt to hold the exploit and

explore functions within my work. In order to continue to build working relationships and soft authority across the organization, Hall and I agreed that specific details about the strategy documents may not be helpful to share as broadly, particularly as they were in development as opposed to endorsed priorities or programming.

Finally, this phase became more and more a reflection of my thoughts, priorities, and ideas about how and why the College Board should work in rural areas as opposed to gathering information from colleagues, research, and data sets and presenting it back to those same colleagues in phases one and two. The work in this phase was directed more toward the authorizing environment—Sanford primarily but other senior leaders as well. I interacted less with those engaged the AP, SDP, and GR divisions. I had to assert my beliefs, preferences, and choices in ways I have infrequently been in position to do given the behind-the-scenes nature of much of my prior work experience. During this phase, I felt less confident about disseminating the strategy documents because they were both fluid and had little formal authority or backing throughout the process.

Strategic Triangle 3: CBRS Pilot

As stated, my transition to producing a pilot strategy document with Hall and Sanford positioned me more squarely than before as the social change agent. I placed myself in the middle of the strategic triangle, prepared to execute the strategy as an employee at the College Board as opposed to influencing the organization from outside or attempting to produce outcomes with another

organization entirely. Throughout the residency, I toggled between placing the work within the framework of AP, government relations, our Access to Opportunity team, or directly under Sanford. Ultimately, I saw the best possibility of success through a structure connected to Sanford, particularly because she herself had spent time and energy developing the strategy—probing and providing feedback via the check-ins and residency process itself.

Triangle 3: operational capacity. The College Board needed to invest in a specific position devoted at least in part to the execution of this strategy—and I placed myself in that role both because I developed the strategy and also because I came to the organization invested in the creation of a rural pilot that had not yet found success within the College Board. An explicit goal identified in the division's annual goal measures would create demand and authority for me to work with others toward successful implementation. In Colorado and Idaho, I would need to work with colleagues in our GR, SDP, and Policy divisions to build structures similar to the USS teams that have been created for other project implementations in states. This pilot strategy uses both Khan Academy and potentially edX as partners in delivering opportunities via technology and brings in two additional divisions: our Access to Opportunity work utilized in earlier All In campaigns for AP and broader access generally. Finally, the pilot requires the development of new partnerships with career-technical student organizations and CTE more broadly, agricultural extension agencies, education service agencies,

and a larger role for our CLEP program as a structure worth building up in rural areas.

Triangle 3: authorizing environment. Positioning the work under Stefanie Sanford continues to build the understanding throughout the College Board that learning how to develop opportunities in rural areas needs to be a focus area. ESSA reauthorization in December 2015 positions education policy work more closely in the hands of states, causing the impetus to pilot in two specific states as opposed to rural consortia or regions of the country. Additionally, Colorado and Idaho partner with the College Board to provide the SAT and PSAT to public schools students. Rural superintendents and stakeholders in these states need to see benefits from these contracts, which provide additional legitimacy and support to the pilot. Finally, I grew up in a rural town in Idaho and made strong connections to rural stakeholders in Colorado during the residency. I believe that I have established myself as a friend to rural communities in these two states, hopefully lowering barriers that may exist for those who may otherwise be seen as outsiders.

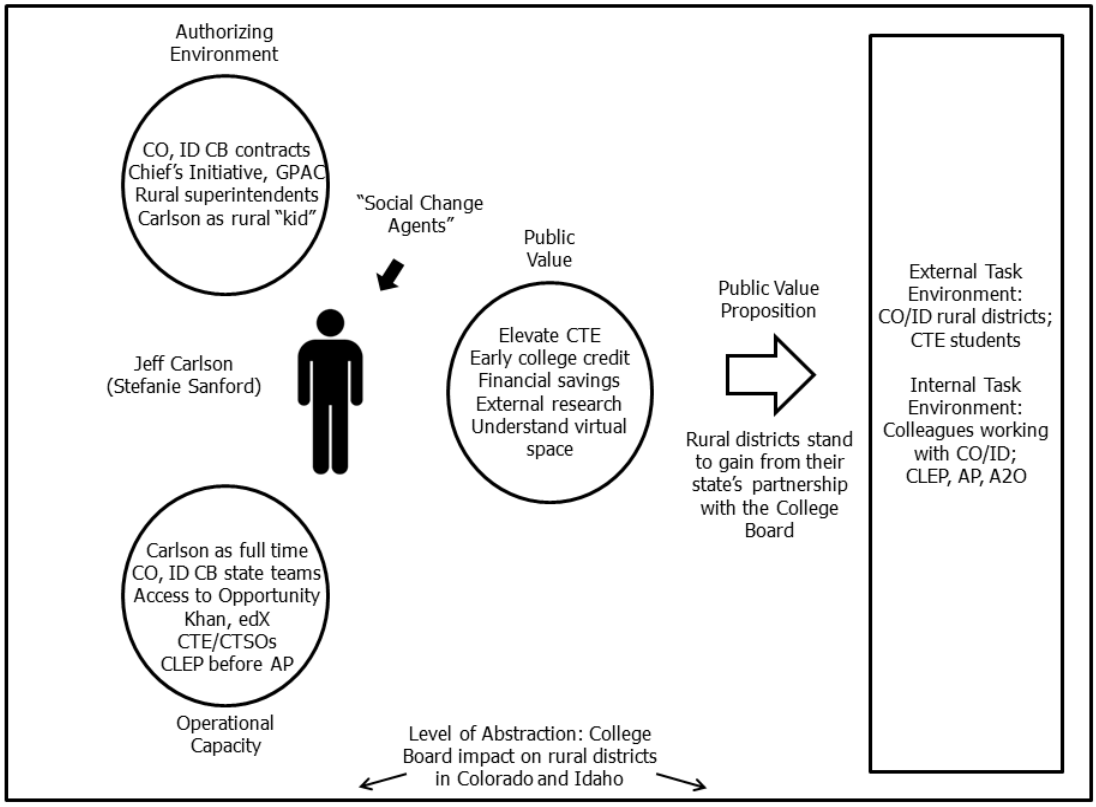
Triangle 3: public value. The design of the pilot promotes the ability to gain early college credit through both our CLEP and AP programs. It has the opportunity to elevate the level of challenge in coursework in Colorado and Idaho's rural schools through career and technical partnerships and recognition of high-quality student work via nationally normed exams as opposed to only a course grade. Students and families stand to gain financial savings through early

credit opportunities. The pilot pushes the organization to better understand the potential of Khan Academy and edX in rural schools, particularly through data collection and research by external partnerships such as the Rural Opportunities Consortium of Idaho.

The pilot also has the opportunity to increase the number of students seeing college as an option. We can create ways for students to gain credit, receive recognition for their work in career and technical classes and associations, and provide them knowledge and resources through the work of the Access to Opportunity team. Whether students choose to pursue college still remains their choice, but this work can provide that choice to a larger number of high schoolers and the families who support them.

Triangle 3: task environment. Choosing two states that contract services through the College Board provides a recognizable task environment. In contrast to the variety of rural education entry points seen in the first strategic triangle prior to the residency, I needed to place borders around who may be impacted by the pilot. More specifically, both states define rural school districts themselves, providing more context than the definitions created by NCES that simply take structural facts into consideration. Specific organizations such as 4H and specific programs such as career and technical education help further define the task environment. The addition of CLEP as a potential product offering provides a connection to the state systems of community colleges, colleges, and universities understood as accessible and familiar to rural communities.

Figure 13: Strategic Triangle 3; College Board Rural Strategy Pilot



Source: Author's design, framework drawn from *Creating Public Value* (2000) and *Recognizing Public Value* (2013) by Dr. Mark H. Moore.

Analyzing All Three Phases

As I described the strategic project in three phases, I also provided specific analysis of each phase. In some cases, I employed the strategic triangle to provide analysis. At other times, I chose to provide context and my interpretation of why things happened the way they did to give the reader a more robust understanding of the phases of the project. In addition to those specific pieces of analysis, this section serves to provide insights across the project's phases. I group these insights into successes, challenges, reflections on the theory of action, and the role of a social change agent in the framing of a strategic project.

Successes. In March 2016, the GPAC leadership team chose to adopt a rural pilot in Colorado and Idaho as a divisional goal for 2016. I was asked to lead this work while also supporting Stefanie Sanford in a special projects role. Based on the theory of action set out in this capstone, I view the choice to approve a pilot project and devote a full-time position to its execution as the strongest indicator of success in this strategic project. Making the choice to pilot the strategy in two states that continue to gain importance to the College Board helped position the work as immediately valuable. I also needed the freedom resulting from the decision to decouple a rural strategy and Advanced Placement in rural schools. We were then able to imagine a position that executes the pilot embedded in GPAC under Sanford, whereas a rural AP project would likely need

positioning within the AP division. At multiple points, Wendell Hall and I debated whether this work should continue within GPAC or AP, eventually decided to position the pilot within GPAC. I spent the residency working with others to explicitly build a value proposition for rural schools within GPAC and also established credibility by working with directly with Sanford.

Beyond the pilot project, the work of the strategic project established new relationships between GPAC and teams in multiple College Board divisions. These included the AP Outreach and Analytics teams, the state teams in Texas, North Carolina, Florida, New York, Colorado, Idaho, Tennessee, and Maine, data analyst teams in Research and Data Science, the Access to Opportunity team, and those who serve as directors of special projects for members of the Executive Leadership Team.

The series of interviews and case study projects elevated the level of internal conversations about what the College Board actually means by rural education and allowed the organization to better determine its goal: determining how to enter rural schools broadly as opposed to only positioning AP within these schools. This work also forced my colleagues and me to hold tension between what could be good for all students, such as the creation of state policy due to rural legislator buy in, versus what may serve only rural students and not the broader population, such as new products or services designed for a rural school environment.

The strategic project also caused reflection within Data Science and Research about when and how to include indicators of urbanicity among other levels of analysis usually considered, such as family income, ethnicity, and gender. Finally, including CLEP and associated edX modules as a possible lever to enhance career and technical and academic coursework, including potentially using CLEP to validate dual enrollment courses, positions the rural pilot as a trial for a new positioning for CLEP as well.

Challenges. While I would categorize the overall outcomes of the strategic projects as successful, a few specific challenges emerged beyond those held within particular phases of the project. Three merit further discussion: process-based challenges around the definition and scope of the strategic project, structural challenges of the residency itself as constructed within the organization, and my individual ability to function as a social change agent as characterized by Moore's strategic triangle.

Only by November did we reach a clear understanding of the scope and purpose of a rural strategy development process at the College Board. This was due in part to a lack of success in earlier iterations of rural exploration but also stemmed from a scattered process coming out of Craig Jerald's announced departure in the first week of residency. Hall and I quickly developed a close working relationship and then had to wade through a swamp of ambiguity surrounding rural education. Only after establishing regular check-ins with Sanford, which developed a rhythm in September, was I able to establish

traction and move toward a rural pilot focused in two particular states with goals wider than AP access and success—likely a function both of access to a senior leader as well as understanding ways in which rural strategies had failed in the past.

The Ed.L.D. residency structure presented challenges as well. I chose to begin my residency in June, one month earlier than is the norm, after early consultation with Hall and Jerald, due to concerns that a July start would give me little time to solidify any presence in the office during the relatively quiet months of July and August. While a summer start presented the opportunity to get up to speed and engage colleagues in long conversations due to the time they had available, I argue it played a role in the ambiguous nature of defining the scope of a rural strategy.

The uniqueness of both the degree program and the residency process allowed me to network with colleagues among many divisions, as the project had implications for multiple teams. This networking function, however, also contributed to confusion at points. Particularly during the time period between July and October when I worked closely and traveled with colleagues in AP and SDP, I found it difficult to step back and see a larger perspective. This duty of a social change agent, to both embed in teams and also step back, leads to the third area of analysis I have chosen to describe in this section.

Reflections on the Theory of Action. I built my theory of action on three "If" clauses requiring action over the course of residency. Below I provide

each, summarize how the action played out through the strategic project, and determine whether I was successful in completing the action step. After that, I address the "then" clauses included in the theory of action.

1) *If I…gather evidence on past practices and results of prior attempts to engage rural communities.* This action materialized in phases one and two of the strategic project through one-on-one interviews with 56 individuals. External stakeholders accounted for 19 interviewees to go with 37 colleagues at the College Board. I also gathered evidence through the case study process involving 18 additional interviews and travel to almost a dozen state gatherings and conferences followed by strategy sessions to summarize results. I was able to collect far more information about the practices and goals behind past rural strategies but was not as successful gathering data for results. This occurred for varied reasons, including inadequate data-sharing agreements, transitions in project leadership, and work streams too new to have data available. Overall, I collected enough information to both understand how rural education had been addressed in the past and also to be seen as a human repository for that material. I consider myself successful in this piece of the theory of action.

2) *If I…create opportunities for College Board employees and external stakeholders to discuss rural education at the College Board.* This piece of the theory of action took place through many of my formal interviews and informal conversations throughout residency. The rest of the policy team and I saw an uptick in the number of times USS teams discussed rural schools and districts,

and both colleagues who manage USS teams reached out to me to discuss how to approach rural-specific goals in state strategy plans for the 2016 fiscal year. I have confidence that my residency and my actions increased the number of rural discussions within GPAC, AP, and SDP.

This section of my theory of action was less successful in that I was and still am a necessary presence in order for colleagues at the College Board to understand and discuss rural education more deeply. Other than this capstone, I chose not to produce artifacts reflecting takeaways and best practices from the four case studies I conducted in phase two. I used to think that the capstone would be sufficient in describing those work streams, but now I think that I should have supplemented the theory of action with this addition: if I produce artifacts and leave behinds reflecting information drawn from interviews and case studies early in the strategic project, then other voices will be able to independently continue conversations about rural education at the College Board. This step may have given me more capacity to accomplish other work. Other than creating documents for strategy sessions with Sanford and Hall, I relied on in-person meetings, phone calls, and video-conferences to provide information about my progress.

3) *If I…present data-driven proposals for rural school and community engagement at the state or regional level.* I moved into this section of the theory of action during phase three of the strategic project, with guidance and prodding provided by Sanford and Hall. Appendix E summarizes the work I took on to

create four potential pilot strategies during the last two months of 2015. Here I narrowed the task environment, attached figures and numerical data to my proposals, and produced a document that was both concise and precise enough to share with other members of the ELT and Market Leadership Team (MLT). Both groups consist of senior leaders at the College Board, and their respective divisions stand to be impacted by the execution of a new rural strategy. This strategy document formed the basis of a new fiscal year 2016 GPAC goal. While I consider this step of my theory of action to be the most successful of my project, the first two steps were necessary to allow for success in the third.

Intended results make up the second section of the theory of action. Each "then" statement in my theory was dependent on actions taken and decisions made by the ELT. In order to have results in the second "then" statement, I needed results in the first. That pattern continued with results for the third statement only possible after conclusions from the second. Overall, I took actions through the first two "if" statements that produced results leading to a positive decision on the first "then" statement. That decision allowed me to pursue stronger, data-driven proposals within the third "if" statement that created results in the last two "then" statements of my theory of action.

1) *Then the ELT will determine whether a rural strategy for Advanced Placement or other programming should be developed*. My results from phases one and two combined with the turn away from an AP-specific process convinced me of the value of a rural strategy for the College Board. Moving beyond AP

shows that I did not convince Sanford and others to call for rural strategy for AP. While the answer regarding an AP strategy was "no," I chose to execute a strategy development process informed by Sanford's feedback that designed a rural strategy for broader College Board programming.

2) *If (1) is positive, then the ELT will determine how to execute a strategy formation process and who assign individuals responsible for implementation*. The third phase of my project would not have resulted in full success unless I outlined how the strategy would be executed. I made myself necessary for successful implementation, which put me in a stronger position to continue working at the College Board following residency. Choosing a pilot strategy in two states lowered the stakes and made the rural strategy a plausible addition to GPAC goals for the year. The choice to add the rural pilot shows evidence of success in this piece of my theory.

3) *Then the ELT will ultimately authorize a new set of priorities focused on higher participation and success in College Board programming in rural schools.* In hindsight, I do not think I achieved full success in the last "then" statement of my theory of action. The ELT should not embark on a large-scale set of priorities until they receive results from the pilot project. If the pilot is successful, the ELT may determine to focus capacity and resources to a larger expansion of CLEP in rural high schools, sponsorships of career and technical education organizations, and external communications materials showing the College Board's expanded

commitment to rural students. For now, this piece of the theory of action remains in progress.

Role of the Social Change Agent

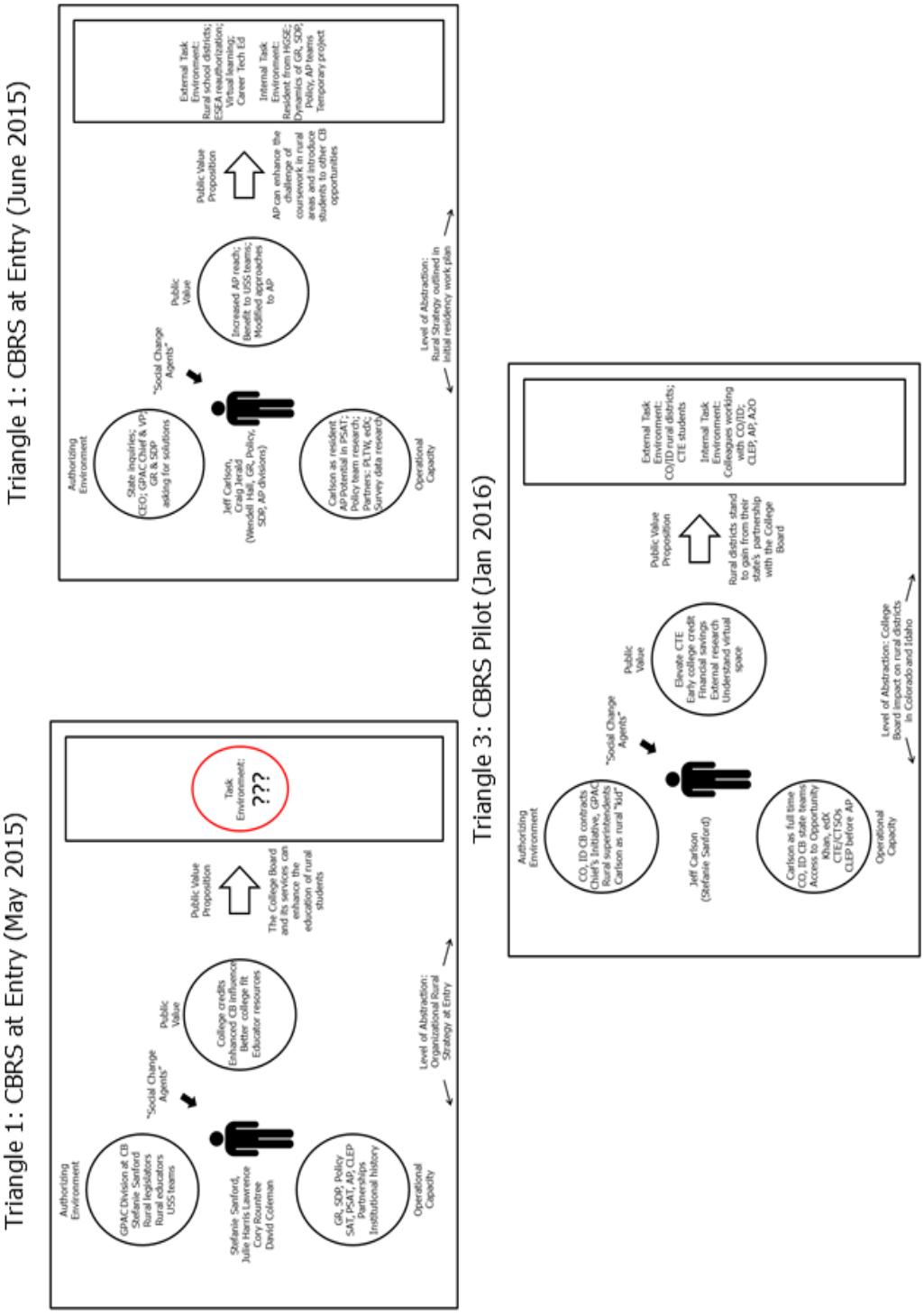
This last section of project analysis has to do with how I saw the role of the social change agent change over the course of my residency. I extensively described Moore's strategic triangle as a tool for analysis throughout the capstone. In this project, however, I filled two roles. I had to both analyze the project as it played out and also position myself as the social change agent necessary to achieve results. To find success in a short time period, residents must see themselves as valuable to the work of the strategic project in order to build a case for a particular change within an organization. To do so, social change agents must position themselves inside each vertex of the strategic triangle. But what does this mean in practice?

As the person responsible for rural strategy development, I needed to be accepted by those in the authorizing environment, those tasked with making the strategy work who are found in the operational capacity vertex, and those who needed to see the strategy as valuable to their work—the public value vertex. The quality and substance of the work matters as well, but I think it may be more important for long-term success to have the agents gain acceptance themselves. Further, in order to be successful, the social change agent has to gain this acceptance in all three areas simultaneously while knowing all along

that the ideal change, and ideal change agent, can look vastly different to those situated in each section of the triangle.

Figure 14 shows each of the three strategic triangles analyzed in the capstone. Notice how the players in each vertex of the triangle, the actions taken, the task environment chosen, and the public value proposition itself fluctuated and narrowed over the course of the project. As we made these refinements, I became positioned more deeply as the social change agent responsible for the value embedded in the strategic project. In the first triangle, my name does not appear. In the analysis of the pilot project, I fill the role of change agent supported by Sanford's positional authority. I could own the decision-making process leading to a pilot only after accepting my role and my background as central to the project's success. Further, this understanding pushed me to stay at the College Board and continue the work.

Figure 14: Social Change Agent at Rural Strategy Levels of Abstraction



Source: Author's design, framework drawn from *Creating Public Value* (2000) and *Recognizing Public Value* (2013) by Dr. Mark H. Moore.

The decisions to carry out dozens of interviews and conduct qualitative case studies allowed me to zoom in from a strategic triangle at a high level of abstraction early in the residency to a specific set of actions in a particular task environment by the end of residency. My personal story also allowed me to be seen as a valid change agent for this project. My background impacted the decision to choose my home state and a state with similar rural conditions, Idaho and Colorado. My colleagues at the College Board and I understand that my familiarity with these types of rural communities can positively impact the work. I do not believe I could have been as successful in this strategic project had I not spent the first eighteen years of my life in small towns in Wyoming, Nevada, and Idaho.

Implications for Self

Following the description and analysis of my strategic project, the capstone's design requires sections focused on takeaways. Our program categorizes these takeaways in three ways: implications for self, for site, and for the sector overall. I will take away three specific implications from this residency and discuss them in this section. First, I write about the relationship between a specific organizational position and one's ability to lead or support strategy development. Next, I describe what I learned about the balance between the need to build coalitions and networks and the need to create space for the perspective of the individual. Finally, I offer thoughts on how I hope to continue to work in organizations allowing iterative strategy development focused on cross-divisional implementation.

Importance of position. Stefanie Sanford's choice to position my rural strategy project as reporting directly to her provided the focus and intensity necessary to produce a specific, succinct pilot proposal seven months into the residency. This is particularly true when combined with the biweekly updates that required her focus and attention beginning in September. I also needed the positional authority attached to her role to continue work with other divisions that otherwise would not have responded to requests from a graduate student policy fellow. The importance of position mattered in the small details as well,

including budget implications as I traveled to multiple states and even in the speed with which I could procure a corporate credit card.

Much of the positional strength in my role also drew from multiple elements of my background. The fact that I grew up in Idaho and had a stepfather who served as a rural superintendent mattered to College Board employees who valued that experience as well as external stakeholders who engaged with me more once they knew I grew up in small town. My age mattered because many in the organization saw me as a younger guy that would benefit from their mentorship. This meant I could ask questions and promote an exploratory approach to rural strategy. Additionally, I capitalized on professional experience in four areas, Capitol Hill staffing, classroom teaching, state education agency work, and doctoral program coursework. I found an association with Harvard to be useful in discussions with executive team leaders and colleagues in AP and less useful in other divisions or in engaging with rural educators.

Networks balanced with individual perspective. In professional roles throughout my career, others see me as a bridge builder and someone who works behind the scenes to get work done. I see a diverse professional network as one result of this working style. Another result is a shift in how I approach content knowledge; I typically gain a breadth of knowledge about many pieces of the organizations I work in without acquiring depth in particular areas.

I became a content expert in rural education issues as a result of this strategic project. My network extended as well, but within the College Board and

policy and advocacy organizations in Washington, DC I am viewed as "someone you should talk to if you want to know about rural schools." To some extent, I feel more prepared to accept this mantle, but I also want to extend the depth of my knowledge within rural education before I would be comfortable fully embracing that distinction.

Future roles. As I pursue professional roles following graduation, I know that I hope to find a balance between developing expertise through an iterative process such as strategy development and doing so in organizations with diverse offerings and far-flung divisions. I enjoyed the challenge of finding specificity within a strategic project while learning about the nuanced working styles and mindsets within both the executive team and the divisions at the College Board.

Prior to matriculating in the Ed.L.D. program, I taught in the New York City Department of Education, worked for a Congressman in the United States House of Representatives, and staffed the President of a top fifty liberal arts college. Each of these roles required the navigation of a bureaucratic organization, which forced me to question my selection of yet another similar organization for my residency site. On this side of the experience, I find myself emboldened to continue working within complex, bureaucratic organizations to exploit current operational and product efficiencies, build networks that contribute to my own work and the work of others, and create specific projects that can create positive change for those my organization intends to impact.

Implications for Site

I bring three takeaways to the College Board's attention in this section. First, the organization should create additional cross-divisional working groups and empower them with decision-making authority. The Unified State Strategy (USS) teams coordinated by Global Policy, Advocacy and Communications (GPAC) and State and District Partnerships (SDP) provide the best current example. Next, the full Executive Leadership Team must be engaged to determine which strategies, if any, should be employed to explore new or additional delivery methods for the Advanced Placement program. Lastly, the structure of ambidextrous organizations can be a useful frame for future ELT discussions in determining how to position prospective work streams.

Cross-divisional working groups. In order to streamline policy decisions with regard to states, the GPAC and SDP divisions within the College Board created USS teams. At least one representative from multiple divisions meet regularly to update the team on progress, address ongoing priorities, and plan for future activity within each state designated as "priority state." These state teams correspond with the states where the College Board needs to be most aligned and has the most diverse priorities. Prior to USS teams, the College Board encountered difficultly finding consistent ways to message priorities and provide updates to state legislators, district administrators, or those working in SEAs.

Over the course of my residency, opportunities for similar structures appeared. I assert that the two strongest cases for regular working groups include data inquiry teams that would involve program, policy, research, and data science divisions, and communications and marketing teams that would align external communications within the program, Access to Opportunity, government relations, higher education, and state and district partnership divisions.

Both of these teams could be designed to meet regularly or to coordinate on specific projects that demand attention and then fade. The first team could streamline data requests and allow for greater communication about the capacity and current priority demands of data analyst teams while also disseminating individual data requests that may reduce duplicitous information inquiries. The second team could help elevate the consistency of messaging to external stakeholders by providing communications and marketing expertise across the various divisions who interact with external groups. While this work appears to occur around specific priorities such as the redesign of the SAT, consistently getting these divisions together to align communications and marketing materials may keep each division from developing their own strategies.

Future of Advanced Placement. The ELT of the College Board should explicitly articulate the long-term strategy for its Advanced Placement program. In particular, the ELT should deliberate and determine how it will address funding streams following the reauthorization of ESSA, the rise of virtual and

blended learning, and the desire to incorporate career preparedness in advanced coursework. On many occasions, the AP division has extended its reach through partnership with organizations including edX, Project Lead the Way, and code.org. Beyond partnerships, however, it would be worthwhile for leaders at the College Board to determine what changes, if any, are needed to the program's design in order to maintain impact and growth in the next ten to fifteen years.

My strategic project required me to learn more about the edX and Project Lead the Way partnerships in particular, as many colleagues pointed me in that direction when asked how Advanced Placement could reach rural schools. I found in practice that AP continues to focus primarily on delivering its program through the means that have found past success and only secondarily providing capacity to new opportunities. A potential need for disconnected, innovative work streams for AP and potentially other divisions leads to my final implication for site.

Exploration through ambidexterity. One of the disadvantages of working at an organization with over 100 years of history shows itself through the power of inertia. When Coleman or any other CEO steps into leadership at the College Board, she or he must do so within the legacies created by institutional history. For example, the process to update and refresh the SAT assessment could only proceed as an extension of previous updates—the past inherently requires us to connect with it.

Tushman and his colleagues conceived of ambidextrous organizations to provide a way to hold tension between old and new. First, the notion of exploiting existing capacities and advantages allows leadership to hold strong to institutional legacy and to use it for good. A leadership team must then combine this exploitation with the ability to explore completely new ways of operating, held apart from those long-held notions of "this is how we do things." If the College Board can find ways to prepare for transitional periods where past or currently existing capacity and advantage becomes diminished, it will be set up for long-term success.

The rural strategy project provides a case study of this approach in large part because rural schools are not a strong existing market for the College Board. The organization should determine where other white space markets exist and create teams whose goals explicitly search for new products or methods of partnership that are not designed to maximize the reach of current offerings. Other than rural school districts, examples of underrepresented markets include community college students, adult learners, early childhood, and elementary education. The most obvious examples of national education priorities with limited College Board interaction are career and technical education and blended learning, outside the SAT partnership with Khan Academy.

Implications for Sector

The takeaways I find valuable for the education sector overall focus on what I learned about rural education and its relationship to the sector at present. In this section, I begin with a description of how I borrowed from work focused on urban school districts to develop an approach to rural strategy. Then I show why I believe more good can come from finding similarities in rural and urban contexts instead of dividing them by their differences. To conclude, I address the need for consistent definitions when describing location-based data, particularly within education.

Lessons drawn from urban district strategy. Rural school districts can benefit greatly from lessons drawn from work in urban districts. When counting the number of students impacted, network improvement communities convened between Council of Great City Schools members have larger impact. But impact can also be measured by moving the principles and lessons learned from those gatherings to groups including rural education collaboratives. For instance, network improvement communities and P-16 alignment strategies brought together sixty-six districts in Eastern and Central Washington. These districts, and their sixty-six superintendents, collectively educate more than 42,000 students through the Rural Alliance for College Success (Battelle for Kids, 2016).

Philanthropy and public policy have endeavored to intervene in the outcomes of urban districts for decades, to varying degrees of success. Policymakers and social change agents interested in improving outcomes for rural districts should draw lessons from the successes and failures seen in urban intervention. While nuanced differences in the contexts between urban schools and rural schools deserve consideration, we should consider the results of urban school reform when making strategy decisions about rural education.

At various points throughout the residency and even in writing the review of knowledge for action in this capstone, I encountered difficulty finding research, reports, and statistics about rural schools from diverse sources. The Rural School and Community Trust, NCES reports on rural schools, and the recent research from the Rural Opportunities Consortium of Idaho provided a large percentage of available information. Extrapolating findings from research and reports focused on urban districts provided at the very least a starting point that I found valuable.

Focus on similarities in urbanicity extremes. Rural education policymakers should seek to improve areas that also need improvement in urban areas. Much like the first implication in this section, coupling the improvement of rural schools to that of urban schools provides a greater value proposition. Finding strategies that can strengthen both rural and urban schools creates groups of common cause across the sector, and limits the number of voices

focused so intently on reminding everyone about the importance of context that they many times forget to move toward action.

Individuals and rural advocacy groups brought forward multiple rural education needs over the course of my residency. I learned about a dearth of qualified teaching candidates, high educator turnover, poverty, unprepared students entering the K-12 system, and the availability of technology in the meetings, hearings, and coffee shop conversations during the last year. I continue to hear these concerns as my work continues. Perhaps unsurprisingly, each issue just listed also found voice in conferences, workshops, and think tank discussions focused on large urban districts that I participated in during my residency. I admit that the particular policy solutions necessary to tackle these problems will be nuanced and contextual. But I posit that a stronger message could emerge if stakeholders invested in each urbanicity extreme could come together to speak collectively about the needs seen consistently as opposed to continuously separating into urban or rural camps.

Need for rural policy and research with consistent definitions. While my other two implications for the sector called for educators to look for similarities in the strategies necessary for improvement in rural and urban areas, I also see a need to research, write, and act with more specificity about rural education. I spent two months of my residency trying to find coherent definitions of rural schools and school districts. This search led me to have two in person conversations with the person responsible for building urbanicity data sets at the

National Center of Education Statistics. Only after those conversations could I comprehend how education organizations currently determine urbanicity categories for schools and districts. Future practitioners will benefit from a body of knowledge that does not require conversations with NCES researchers to understand the term "rural" in research and reports. This capstone, particularly in the RKA, represents my attempt to contribute to that body of knowledge.

Conclusion

> I wouldn't give a fig for the
> simplicity on this side of complexity;
> I would give my right arm for the
> simplicity on the far side of complexity.
>
> —Oliver Wendell Holmes Jr.
> (as cited in Moore, 2013)

I conclude my capstone with this epigraph for two reasons. First, I inundated my readers with the strategic triangle throughout this capstone. It seems a worthy tribute to borrow another page from Mark Moore and add the quotation that begins his text, *Recognizing Public Value*, to my capstone as well. Secondly, and completely coincidentally, Stefanie Sanford continually used this quote to describe the process that led us to a College Board Rural Strategy pilot. Together, we navigated the complicated history of rural engagement at the organization while also finding specificity in an approach to a new set of work in Colorado and Idaho.

The ambiguity embedded in my residency, while mentioned as a challenge at various points in this capstone, also created an opportunity to look into multiple options, challenge my assumptions and those of others, and make adjustments as new information came into focus including the reauthorization of the Elementary and Secondary Education Act. Following that complexity, Wendell Hall and Sanford pushed me to articulate a coherent, simple strategy buoyed by data and evidence. This work continues beyond the residency as we engage

stakeholders in rural Colorado and Idaho communities to bring the rural pilot to life.

This capstone began by introducing the reader to the College Board's organizational history. That introduction showed how the development of a strategy for rural schools provided the basis of a strategic project due to the confluence of three factors: my personal background, current political circumstances that influence how stakeholders see the College Board, and the view that rural schools presented an untapped market for College Board products. My review of knowledge for action provided background information relevant to my strategic project. First, I acquainted the reader with Moore's strategic triangle framework for understanding how social change takes place in the public sector. Next, I wrote brief summaries of five rural education trends that informed my approach to the strategic project.

My theory of action set up a series of activities I took on during residency. These actions took place between June 2015 and January 2016 and played out in three distinct phases. Phase one and two successfully addressed the first two "if" statements of my theory of action, and I used the months of November and December 2015 to develop a rural strategy proposal as required by the third "if" statement. Continual movement from a complex, undefined rural education environment to a specific set of actions, objectives, and states in which to work defined this strategic project's evolution.

Collectively, this project led to results in all of the "then" pieces in my theory of action, most specifically through the authorization of a rural strategy pilot in Colorado and Idaho beginning in the summer of 2016. This pilot seeks to expand the use of College Board products and partnerships in Colorado and Idaho's rural schools. In order to be successful, the pilot must provide a strong value proposition for a focus on the students and educators in rural schools. This value must be recognized by the people who make up each of the vertices in Moore's strategic triangle, specifically: those who authorize the strategy, those who provide the capacity to implement the strategy, and those who will be impacted by the strategy.

More than a business case. What I describe as a value proposition for rural strategy could easily be interpreted as the business case justifying a new work stream at the College Board. Much of this capstone, and much of my project, focused on the creation of such justification in terms of numbers of students, types of services, and costs for providing access. Nonprofit organizations receive their tax-exempt status, however, by pursuing much of their agenda through an equity lens in an attempt to improve the common good. The College Board, for instance, seeks to make a positive impact on educational opportunity at a national scale. CEO David Coleman sees the founding documents of the United States as keys to how the organization should see its work and how students can engage with history and literature. The Constitution, Declaration of Independence, and numerous documents hang throughout the

Washington, DC office where my residency took place. Much of the reason I chose the College Board for residency stems from its potential to make large-scale impact and its leaders' passion for doing so through an idealized understanding of the purpose of education.

Along with a shared sense of more equitable outcomes for students, I also share Coleman's penchant for the founding documents. In fact, I read presidential biographies when I am not writing capstones. As I read David McCullough's biography *John Adams*, I found Adams to be greatly underappreciated. Among many accomplishments, he nominated Washington to be commander-in-chief of the colonial armies, signed the Declaration after being the first to offer a resolution of independence, and won the first full presidential race before serving as our second President. Incredibly, he died July 4, 1826, the same day as his political foe and dear friend Thomas Jefferson, fifty years to the day that the two men joined their fellow founders to publicly announce the Declaration Jefferson wrote. In a nod to Adams, I drew the title of my capstone from his 1765 Dissertation on the Canon and Feudal Law (Adams, 1856). He wrote then,

> Liberty cannot be preserved without a general knowledge among the people, who have a right, from the frame of their nature, to knowledge, as their great Creator…has given them understandings, and a desire to know; but besides this, they have a right, an indisputable, unalienable,

> indefeasible, divine right to that most dreaded and envied kind of knowledge…of the *characters and conduct of their rulers*. (p. 456).

In the dissertation, Adams makes the case that only through political transparency and the diffusion of knowledge to all citizens can the experiment of American democracy remain intact. For the College Board to continue its role in expanding educational opportunity to more students, the organization should endeavor to understand how students and educators in rural communities can better enjoy Adam's conception of general knowledge among the people.

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Appendices

Appendix A: State Virtual Schools

State	Approx. # of AP Courses Offered in State Virtual Programs	Approx. # of Total Course Enrollments in State Virtual Programs	AP Offerings at State Fully Online Schools (Examples)	Approx. # of Student Enrollments in State Fully Online Schools
AL	11	51,809	N/A*	0
AK	8	608	0	76
AZ	N/A	0	Arizona Virtual Academy offers 16 AP courses	48,358
AR	7	3,734	Arkansas Virtual Academy offers 16 AP courses	1,334
CA	12	172,293 (students and teachers for PD courses)	California Virtual Academies offer 16 AP courses	40,000
CO	2	914	Colorado Connections Academy offers 14 AP courses	16,215
CT	0	2,400	N/A	0
DE	N/A	N/A	N/A	N/A
FL	15	377,508	N/A	0
GA	27	33,041	Georgia Cyber Academy offers 16 AP courses	18,035
HI	19	1,514	N/A	0
ID	12	20,820	Idaho Virtual Academy offers 16 AP courses	5,079
IL	12	3,097	N/A	0
IN	N/A	0	Hoosiers Academy offers 16 AP courses	7,603
IA	13	1,201	Iowa Virtual Academy offers 16 AP courses	539
KS	N/A	0	Lawrence Virtual School offers 4 AP courses	5,136
KY	N/A	N/A	N/A	N/A
LA	20	2,479	Louisiana Virtual Academy offers 16 APs	3,026
ME	21	1,700	Unclear	750
MD	16	4,817	N/A	0
MA	N/A	0	Unclear, most likely 16 AP courses similar to other K12 course offerings	454
MI	18	21,944	GenNet Learning offers 28 AP courses	6,737
MN	N/A	0	Minnesota Virtual Academy offers 16 AP courses	9,563
MS	10	2,360	N/A	0
MO	24	1,992	N/A	0
MT	13	6,785	N/A	0
NE	N/A	N/A	N/A	N/A

State	Approx. # of AP Courses Offered in State Virtual Programs	Approx. # of Total Course Enrollments in State Virtual Programs	AP Offerings at State Fully Online Schools (Examples)	Approx. # of Student Enrollments in State Fully Online Schools
NV	N/A	0	Nevada Virtual Academy offers 16 AP courses	10,000
NH	14	22,731	Virtual Learning Academy Charter School offers 15 AP courses	162
NJ	N/A	N/A	N/A	N/A
NM	14	3,121	New Mexico Virtual Academy offers 16 AP courses	977
NY	N/A	0	NYC's iLearn NYC offers 15 APs; It is unclear how many are offered through the state's Virtual AP program	NYC's iLearn: 76,408 course enrollments; ~95 districts received RTTT grants through state Virtual AP program
NC	13	104,799	N/A	0
ND	11	6,100	N/A	0
OH	26	Unclear	Ohio Virtual Academy offers 16 AP courses	39,044
OK	N/A	0	Oklahoma Virtual Charter Academy offers 16 AP courses	7,010
OR	N/A	0	Oregon Virtual Academy offers 16 AP courses	7,172
PA	N/A	0	Commonwealth Connections offers 8 APs	36,596
RI	N/A	N/A	N/A	N/A
SC	10	24,491	South Carolina Virtual Charter School offers 16 AP courses	8,877
SD	13	4,029	Unclear	125
TN	N/A	0	0	2,927
TX	18	5,708	Texas Virtual School Network (TxVSN) has 2 components: statewide course catalog for students to supplement and full-time TXVSN online schools (18 APs)	10,258
UT	0	4,741	Utah Virtual Academy offers 16 AP courses	3,491
VT	9	2,823	N/A	0
VA	24	19,433	N/A	0
WA	25	23,466	Washington Virtual Academies offers 16 APs	5,200
WV	20	11,270	N/A	0
WI	19	5,357	Wisconsin eSchool Network offers 20 AP courses	7,188
WY	N/A	20	Wyoming Connections Academy offers 14 AP courses	1,689

Appendix B: DRAFT Work Plan for Developing a College Board Strategy to Expand AP Participation in Rural Communities

Phase	Milestones/ Deliverables	Approx. Dates	Steps	Internal CB Partners	NOTES
1. Define the Challenge	Written analysis that clarifies the challenges to expanding AP participation in rural areas; defines key factors impeding access to AP for rural students; identifies where the problem is greatest and how the problem and underlying factors vary geographically and demographically.	June-Aug	a. Create heat map of AP participation in rural areas using CB data	Policy, AP, Research	
			b. Conduct scan of rural state policies related to AP, leveraging research already conducted by Julia Fox and updates from State Watch	Policy, GR, AP	Are rural states leveraging strong policies to improve AP access and participation?
			c. Collect and analyze relevant, available research (internal and external) on factors influencing AP access and participation in rural areas	Policy, AP, GR, SDP, Research	To what extent is this about access (lack of available courses) vs. participation (lack of demand for/enrollment in courses)?
			d. Collect CB "field intel" via State Watch survey and phone interviews	Policy, AP, GR, SDP	

			e. Conduct opinion research through Data Science	Policy, AP, Data Science	FAMILIES: What do rural students and parents believe about the benefits AP? What factors do they weigh in deciding whether to enroll? Is access to courses the biggest challenge? Do schools make students/families aware of AP opportunities and encourage students to apply?
			f. Draft, vet, refine analysis internally	Data, AP	
			g. Share analysis with Stefanie Sanford and decide whether/how to brief other senior leaders	Policy, Office of the Chief, Office of the President	
2. Investigate Potential Solutions	Memo summarizing	Sept-Oct	a. Gather internal history of prior CB attempts to address this challenge + lessons learned	AP, SDP, Membership	
			b. Collect research on prior external attempts to address this challenge + lessons learned	Policy, AP, SDP, GR, Membership	
			c. Identify any rural states or districts with high/improving rates of AP participation, investigate why, summarize lessons	Policy, AP, GR, SDP, Membership	
			d. Analyze whether successful AP expansion strategies used in urban/suburban areas could be leveraged in rural areas	Policy, AP	
			e. Analyze role that CB's AP Potential tool could play in addressing rural challenge	Policy, AP	

			f. Generate list of potential strategies and vet with internal thought group	Policy, AP, [identify others]	Pull together an internal "kitchen cabinet" to vet ideas and provide thought partnership?
			g. If appropriate, identify strategic partnership possibilities and potential roles for CB Membership	Policy, AP, Office of the Chief, Membership	
			h. Connect potential strategies to analysis and heat map from Phase 1	Policy	
3. Vet and Refine Strategic Options	Strategic scenarios to use as pre-reads for internal vetting and feedback through "straw man" approach	Nov-Dec	a. Develop strategic scenarios to vet through "straw man" approach		State-focused strategy; district-focused strategy; combination
			b. Convene feedback and discussion groups to vet "straw man" strategic scenarios	Policy, Office of the Chief, [Office of the President?]	Should this be the same internal group? Different groups drawn from a larger pool we identify? Can this be a session at the Fall CB Leadership Convening? NOTE: Each scenario can be pre-vetted in "dry runs" within Policy team.
			c. Obtain confidential feedback and advice from external experts	Policy, AP	Should we form a confidential advisory committee of external experts?
			d. Obtain feedback from CB National Councils? [GAC, Academic?]		Solicit Jenny Krugman advice on whether/how to do this
			e. Brief GPA Leadership Team on emerging strategy during December work session; obtain feedback; get clear on how to structure Phase 4	Policy, Office of the Chief	

4. Focus, Flesh Out, Finalize Strategy	Final strategy memo, presentations to CB senior leadership and BOT; successful defense of Capstone	March-May	a. Decide on direction for primary strategy to flesh out and finalize in Phase 4	Policy, Office of the Chief	
			b. Flesh out PUBLIC POLICY dimension	Policy	
			c. Flesh out PARTNERSHIP dimension	Office of the Chief	
			d. Flesh out ADVOCACY dimension	Policy, Office of the Chief, SDP	
			e. Flesh out COMMUNICATIONS dimension	Communications and Marketing	Based on needs identified in Data Science opinion research
			f. As necessary based on 4.e. above, conduct message testing with Data Science	Data Science	
			g. Define roles for CB units - AP, GR, SDP, Membership	Policy, GR, SDP, Membership	
			h. Draft strategy memo with estimated costs, strategic benefits and risks, proposed launch plan, and timeline	Policy	
			i. Present strategy memo to CB senior leadership via the Market Leadership Team (MLT) and/or Executive Leadership Team (ELT)	Policy, Office of the Chief or Office of the President	MLT or ELT determined by Stefanie Sanford in consultation with David Coleman (Coleman on both)
			k. Defend capstone project at Harvard	Policy	
			j. Present strategy to the Board of Trustees	Policy, Office of the Chief, Governance	NOTE: BOT meets in June but Jeff's revised contract ends in May. Discuss with Jeff.

Appendix C: School and District Database Dictionary

SOURCE TABLE	TOPIC	FIELD	Notes
NCES_2015_120115/ NCES CCD LEA 2013-14		STATE	transformed from abbreviation to full state name
NCES_2015_120115		AICODE	to reflect the most up to date AI to NCES crosswalk from IT in Research database
NCES_2015_120115		NCESID	
NCES_2015_120115		SCHNAME	
NCES_2015_120115/ NCES CCD LEA 2013-14		LEAID	
		LEANM	
		LOCALE	end user can aggregate by category using pivot table in excel
		LOCALE_RC	grouped based on descriptions from NCES data dictionary (see underlying details below)
		LATITUDE	to enable Jeff/Julia to map in Tableau if desired
		LONGITUDE	to enable Jeff/Julia to map in Tableau if desired
		TYPE_RC	NCES code for type of school
NCES_2015_120115		MAGNET_RC	Magnet school
NCES_2015_120115		CHARTR_RC	Charter school
NCES_2015_120115		TITLEI	Title I Eligible School
NCES_2015_120115		STITLI	School-wide Title I
NCES_2015_120115		FRL_PCT	Percent of Enrollment (all grade levels) eligible for Free or Reduced-Price Lunch
NCES_2015_120115	NCES CCD Enrollment: 2013-14 AY	GR_9_ENR	Universe of schools/districts reflects any school with enrollment in grade 9, 10, 11, or 12. Per NCES, district-level enrollment reflects the sum of school level data (not the enrollment data in the LEA file). Schools report the students physically in their buildings, whereas districts report the students they are legally responsible for, which can result in small deltas.
NCES_2015_120115		GR_10_ENR	
NCES_2015_120115		GR_11_ENR	
NCES_2015_120115		GR_12_ENR	
NCES_2015_120115		GR_9to12_ENR	

derived		GR_1011_ENR	
derived		GR_1112_ENR	
PSAT_WK_2015	PN 2014 Admin Grade 10 and 11 Participation	PN_EXAMINEES_GR10	Number of 10th graders who took PSAT/NMSQT in October 2014
PSAT_WK_2015		PN_EXAMINEES_GR11	Number of 11th graders who took PSAT/NMSQT in October 2014
PSAT_WK_2015		PN_EXAMINEES_GR1011	Number of 10th or 11th graders who took PSAT/NMSQT in October 2014
derived		PN_GR1011_PART_RT	Percent of 10th or 11th graders who took PSAT/NMSQT in October 2014
AP_WK_EXAM_2015	AP 2015 Admin Participation	AP_TOTAL_EXAMS	Number of Exams
AP_WK_EXAM_2015		AP_TOTAL_EXAMINEES	Number of Students who took least one exam
AP_WK_EXAM_2015	AP 2015 Admin Grade 11 and 12 Participation	AP_GR1112_EXAMS	Number of Exams completed by 11th and 12th graders
AP_WK_EXAM_2015		AP_GR1112_EXAMINEES	Number of 11th or 12th graders who took at least one AP Exam
derived		AP_GR1112_PART_RT	Percent of 11th or 12th graders who took at least one AP Exam
AP_WK_EXAM_2015	AP 2015 Admin Grade 11 and 12 Performance	AP_GR1112_345_EXAMINEES	Number of 11th or 12th graders who scored 3, 4, or 5 on at least one AP Exam
derived		AP_GR1112_PERF_RT	Percent of 11th or 12th graders who scored 3, 4, or 5 on at least one AP Exam
AP_WK_EXAM_2015		AP_GR1112_5_EXAMINEES	Number of 11th or 12th graders who scored 5 on at least one AP Exam
derived		AP_GR1112_HIPERF_RT	Percent of 11th or 12th graders who scored 5 on at least one AP Exam

derived		NUM_AP_OFFERED	Number of AP Subjects Offered - Count of below 'Yes' values if AP_TOTAL_EXAMS>0
derived	"Rule of 5" Estimation of AP Course Offerings: Flagged as offering subject if there were 5 or more AP examinees in the 2015 admin or 5 or more students were reported on the 2014-15 AP Coordinator Survey. District fields reflect count of school's flagged as 'Yes.'	OFFERED_ART3D	Yes, if EXAMINEES_ART3D>=5 or ENR_ART3D>=5
derived		OFFERED_ARTHIS	Yes, if EXAMINEES_ARTHIS>=5 or ENR_ARTHIS>=5
derived		OFFERED_ARTST2	Yes, if EXAMINEES_ARTST2>=5 or ENR_ARTST2>=5
derived		OFFERED_ARTSTD	Yes, if EXAMINEES_ARTSTD>=5 or ENR_ARTSTD>=5
derived		OFFERED_BIOL	Yes, if EXAMINEES_BIOL>=5 or ENR_BIOL>=5
derived		OFFERED_CALCAB	Yes, if EXAMINEES_CALCAB>=5 or ENR_CALCAB>=5
derived		OFFERED_CALCBC	Yes, if EXAMINEES_CALCBC>=5 or ENR_CALCBC>=5
derived		OFFERED_CHEM	Yes, if EXAMINEES_CHEM>=5 or ENR_CHEM>=5
derived		OFFERED_CHINES	Yes, if EXAMINEES_CHINES>=5 or ENR_CHINES>=5
derived		OFFERED_COMSCA	Yes, if EXAMINEES_COMSCA>=5 or ENR_COMSCA>=5
derived		OFFERED_CPSTNS	Yes, if EXAMINEES_CPSTNS>=5
derived		OFFERED_ECONMA	Yes, if EXAMINEES_ECONMA>=5 or ENR_ECONMA>=5
derived		OFFERED_ECONMI	Yes, if EXAMINEES_ECONMI>=5 or ENR_ECONMI>=5
derived		OFFERED_ENGLAN	Yes, if EXAMINEES_ENGLAN>=5 or ENR_ENGLAN>=5
derived		OFFERED_ENGLIT	Yes, if EXAMINEES_ENGLIT>=5 or ENR_ENGLIT>=5
derived		OFFERED_ENVSCI	Yes, if EXAMINEES_ENVSCI>=5 or ENR_ENVSCI>=5
derived		OFFERED_EURHIS	Yes, if EXAMINEES_EURHIS>=5 or ENR_EURHIS>=5
derived		OFFERED_FRNLAN	Yes, if EXAMINEES_FRNLAN>=5 or ENR_FRNLAN>=5
derived		OFFERED_GERLA	Yes, if EXAMINEES_GERLA>=5 or ENR_GERLA>=5
derived		OFFERED_GOVCOM	Yes, if EXAMINEES_GOVCOM>=5 or ENR_GOVCOM>=5
derived		OFFERED_GOVUS	Yes, if EXAMINEES_GOVUS>=5 or ENR_GOVUS>=5
derived		OFFERED_HUMGEO	Yes, if EXAMINEES_HUMGEO>=5 or ENR_HUMGEO>=5
derived		OFFERED_ITAL	Yes, if EXAMINEES_ITAL>=5 or ENR_ITAL>=5
derived		OFFERED_JAPAN	Yes, if EXAMINEES_JAPAN>=5 or ENR_JAPAN>=5
derived		OFFERED_LATINV	Yes, if EXAMINEES_LATINV>=5 or ENR_LATINV>=5
derived		OFFERED_MUSICT	Yes, if EXAMINEES_MUSICT>=5 or ENR_MUSICT>=5

derived		OFFERED_PHYS1	Yes, if EXAMINEES_PHYS1>=5 or ENR_PHYS1>=5
derived		OFFERED_PHYS2	Yes, if EXAMINEES_PHYS2>=5 or ENR_PHYS2>=5
derived		OFFERED_PHYSEM	Yes, if EXAMINEES_PHYSEM>=5 or ENR_PHYSEM>=5
derived		OFFERED_PHYSM	Yes, if EXAMINEES_PHYSM>=5 or ENR_PHYSM>=5
derived		OFFERED_PSYCH	Yes, if EXAMINEES_PSYCH>=5 or ENR_PSYCH>=5
derived		OFFERED_SPANLA	Yes, if EXAMINEES_SPANLA>=5 or ENR_SPANLA>=5
derived		OFFERED_SPANLT	Yes, if EXAMINEES_SPANLT>=5 or ENR_SPANLT>=5
derived		OFFERED_STAT	Yes, if EXAMINEES_STAT>=5 or ENR_STAT>=5
derived		OFFERED_USHIST	Yes, if EXAMINEES_USHIST>=5 or ENR_USHIST>=5
derived		OFFERED_WDHIST	Yes, if EXAMINEES_WDHIST>=5 or ENR_WDHIST>=5
AP_WK_EXAM_2015	AP 2015 Admin Participation by Subject (all grades)	EXAMINEES_ART3D	Number of AP Studio Art: 3-D Design Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_ARTHIS	Number of AP Art History Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_ARTST2	Number of AP Studio Art: 2-D Design Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_ARTSTD	Number of AP Studio Art: Drawing Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_BIOL	Number of AP Biology Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_CALCAB	Number of AP Calculus AB Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_CALCBC	Number of AP Calculus BC Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_CHEM	Number of AP Chemistry Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_CHINES	Number of AP Chinese Language and Culture Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_COMSCA	Number of AP Computer Science A Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_CPSTNS	Number of AP Capstone Seminar Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_ECONMA	Number of AP Macroeconomics Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_ECONMI	Number of AP Microeconomics Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_ENGLAN	Number of AP English Language and Composition Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_ENGLIT	Number of AP English Literature and Composition Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_ENVSCI	Number of AP Environmental Science Examinees - 2015 Admin

AP_WK_EXAM_2015		EXAMINEES_EURHIS	Number of AP European History Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_FRNLAN	Number of AP French Language and Culture Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_GERLA	Number of AP German Language and Culture Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_GOVCOM	Number of AP Comparative Government and Politics Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_GOVUS	Number of AP United States Government and Politics Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_HUMGEO	Number of AP Human Geography Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_ITAL	Number of AP Italian Language and Culture Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_JAPAN	Number of AP Japanese Language and Culture Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_LATINV	Number of AP Latin Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_MUSICT	Number of AP Music Theory Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_PHYS1	Number of AP Physics 1: Algebra-Based Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_PHYS2	Number of AP Physics 2: Algebra-Based Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_PHYSEM	Number of AP Physics C: Electricity and Magnetism Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_PHYSM	Number of AP Physics C: Mechanics Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_PSYCH	Number of AP Psychology Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_SPANLA	Number of AP Spanish Language and Culture Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_SPANLT	Number of AP Spanish Literature and Culture Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_STAT	Number of AP Statistics Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_USHIST	Number of AP United States History Examinees - 2015 Admin
AP_WK_EXAM_2015		EXAMINEES_WDHIST	Number of AP World History Examinees - 2015 Admin
2014-15 AP COORDINATOR SURVEY	Anticipated AP 2015 Admin Participation by Subject (all grades, from survey	ENR_ART3D	Number of AP Studio Art: 3-D Design Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_ARTHIS	Number of AP Art History Students Enrolled/Examinees Anticipated in Fall 2014

2014-15 AP COORDINATOR SURVEY	filled out in Fall 2014)	ENR_ARTST2	Number of AP Studio Art: 2-D Design Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_ARTSTD	Number of AP Studio Art: Drawing Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_BIOL	Number of AP Biology Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_CALCAB	Number of AP Calculus AB Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_CALCBC	Number of AP Calculus BC Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_CHEM	Number of AP Chemistry Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_CHINES	Number of AP Chinese Language and Culture Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_COMSCA	Number of AP Computer Science A Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_ECONMA	Number of AP Macroeconomics Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_ECONMI	Number of AP Microeconomics Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_ENGLAN	Number of AP English Language and Composition Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_ENGLIT	Number of AP English Literature and Composition Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_ENVSCI	Number of AP Environmental Science Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_EURHIS	Number of AP European History Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_FRNLAN	Number of AP French Language and Culture Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_GERLA	Number of AP German Language and Culture Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_GOVCOM	Number of AP Comparative Government and Politics Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_GOVUS	Number of AP United States Government and Politics Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_HUMGEO	Number of AP Human Geography Students Enrolled/Examinees Anticipated in Fall 2014

2014-15 AP COORDINATOR SURVEY		ENR_ITAL	Number of AP Italian Language and Culture Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_JAPAN	Number of AP Japanese Language and Culture Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_LATINV	Number of AP Latin Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_MUSICT	Number of AP Music Theory Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_PHYS1	Number of AP Physics 1: Algebra-Based Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_PHYS2	Number of AP Physics 2: Algebra-Based Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_PHYSEM	Number of AP Physics C: Electricity and Magnetism Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_PHYSM	Number of AP Physics C: Mechanics Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_PSYCH	Number of AP Psychology Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_SPANLA	Number of AP Spanish Language and Culture Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_SPANLT	Number of AP Spanish Literature and Culture Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_STAT	Number of AP Statistics Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_USHIST	Number of AP United States History Students Enrolled/Examinees Anticipated in Fall 2014
2014-15 AP COORDINATOR SURVEY		ENR_WDHIST	Number of AP World History Students Enrolled/Examinees Anticipated in Fall 2014
NCES FIELD VALUES			
LOCALE	NCES urban-centric locale code.		
	11 = City, Large: Territory inside an urbanized area and inside a principal city with population of 250,000 or more.		
	12 = City, Mid-size: Territory inside an urbanized area and inside a principal city with a population less than 250,000 and greater than or equal to 100,000.		
	13 = City, Small: Territory inside an urbanized area and inside a principal city with a population less than 100,000.		

	21 = Suburb, Large: Territory outside a principal city and inside an urbanized area with population of 250,000 or more.	
	22 = Suburb, Mid-size: Territory outside a principal city and inside an urbanized area with a population less than 250,000 and greater than or equal to 100,000.	
	23 = Suburb, Small: Territory outside a principal city and inside an urbanized area with a population less than 100,000.	
	31 = Town, Fringe: Territory inside an urban cluster that is less than or equal to 10 miles from an urbanized area.	
	32 = Town, Distant: Territory inside an urban cluster that is more than 10 miles and less than or equal to 35 miles from an urbanized area.	
	33 = Town, Remote: Territory inside an urban cluster that is more than 35 miles from an urbanized area.	
	41 = Rural, Fringe: Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster.	
	42 = Rural, Distant: Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster.	
	43 = Rural, Remote: Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster.	
TYPE	NCES code for type of school:	
	1 = Regular school	
	2 = Special education school	
	3 = Vocational school	
	4 = Other/alternative school	
	5 = Reportable program (new code starting in 2007-08)	
	NCES code for type of district:	
	1 = Regular local school district	
	2 = Local school district that is a component of a supervisory union	
	3 = Supervisory union	
	4 = Regional education service agency	
	5 = State-operated agency	
	6 = Federally-operated agency	
	7 = Charter agency	

	8 = Other Education agency	
MAGNET	Magnet school. Regardless of the source of funding, a magnet school or program is a special school or program designed to attract students of different racial/ethnic backgrounds for the purpose of reducing, preventing, or eliminating racial isolation and/or to provide an academic or social focus on a particular theme.	
	1 = Yes	
	2 = No	
CHARTR	Charter school. A school that provides free elementary and/or secondary education to eligible students under a specific charter granted by the state legislature or other appropriate authority.	
	1 = Yes	
	2 = No	
TITLEI	Title I Eligible School. A Title I school designated under appropriate state and federal regulations as being eligible for participation in programs authorized by Title I of Public Law 103-382.	
	1 = Yes	
	2 = No	
STITLI	School-wide Title I. A program in which all the pupils in a school are designated under appropriate state and federal regulations as being eligible for participation in programs authorized by Title I of Public Law 103-382.	
	1 = Yes	
	2 = No	

Appendix D: College Board Rural Strategy Pilot

CollegeBoard

Rural Strategy Pilot: Rocky Mountain Contracts (Colorado/Idaho) **January 2016**

Overview: This document outlines a strategy and action steps to **REACH** and **PROPEL** approx. 200,000 rural public school students in about 260 state-defined rural school districts (~150 CO and ~110 ID) representing over 60% of all districts in the two states. The strategy forms new partnerships, builds on existing rural pipelines, and creates innovative ways for rural students and educators in Colorado and Idaho to access College Board solutions. Rural communities in those states that partner with the College Board to provide statewide access to PSAT and/or SAT can take maximum advantage of this pilot.

Rural Strategy Goals

1. Expand **REACH** to approx. 100K rural students through focused A2O efforts, free test practice, and purposeful targeting of College Board programs to high school students by:
   - Partnering with well-established CTE organizations.
     - 41,000 CO & ID members of FFA, FCCLA, and similar student organizations.
     - 166,000+ 4H members through agricultural extension offices (CSU and UI).
   - Utilizing already existing rural consortia and virtual distance learning infrastructure.
     - Colorado Rural Education Council: oversees support, research, and advocacy for needs, concerns, and particular problems in 149 state-defined rural districts.
     - Idaho Department of Education's Rural Education Initiative: task force impacting district leadership in 113 state-defined rural districts.
   - Capitalizing on Khan, code.org, and other partnerships to increase relevance and participation in College Board offerings (e.g. PSAT, SAT, CLEP).
     - Converting PSAT to AP and CLEP via AP Potential; increasing rural participation in AP or CLEP exams by 5% over two years, to 39.0% in CO and 15.3% in ID, by AY 2017-18.
     - Focusing on AP/CLEP exams relevant to established career clusters in CTE programs.
       - Agriculture: 13 AP exams and closely related CLEP exams.
       - Health sciences: 13 AP exams and closely related CLEP exams.
       - Information technology: 9 AP exams and closely related CLEP exams.
     - Khan Idaho project: 50 schools, approx. 35 districts across Idaho.
2. Identify and **PROPEL** students in small rural high schools to stronger college and career choices by:
   - Finding and focusing on low-income, high-achieving rural students.
     - Identify students for A2O interaction through AP potential, state assessment data, and CTSO student leader rosters.
   - Enhancing the quality and value of existing early college and career opportunities.
     - Promote fee waivers and score sending for:
       - 6,148 PN/2,342 AP/4,183 SAT/2,334 non-military CLEP exam takers in Colorado.
       - 6,386 PN/560 AP/4,913 SAT/667 non-military CLEP exam takers in Idaho.
     - Align and promote existing Khan Academy and edX modules that will enhance success on CLEP and AP exams associated with CTE career clusters.
   - Supporting school and community professionals who provide college and career counseling in these schools.
     - Connect professionals at Colorado and Idaho School Counselor Association (CSCA/ISCA) to College Board resources and partners (FAFSA/CSS, NCAN, College Advising Corps).

Action Steps

1. **SELECT:** Colorado and Idaho as pilot. Potential models listed in Pilot Appendix. Chief advantages:
   - Khan partnership in region.
   - Proof points: Both states contract with CB to provide statewide PN/SAT.
   - Greenspace: historically, both states in transition from ACT to College Board partnership.
   - Potential partners in philanthropy and research: Colorado Education Initiative, Gates Family Foundation in CO; ROCI, Albertsons Foundation in ID.
   - Small rural districts make up 70% CO/60% ID total districts, **covering over 50% of legislative districts in each state.**

2. **PARTNER:** Strategically partner with 2+ philanthropic or well-networked partners (Albertson's Foundation, Farm Bureau) to create stronger college and career-readiness culture in rural communities.
   - Khan Idaho: double the # of rural schools to approx. 50 including expansion to Colorado.
   - Extension offices as CLEP testing centers: Create test center access at 1/3 of county extension offices; 21+ new in CO, 15+ in ID.

3. **TARGET:** Package and position existing College Board solutions (e.g. CLEP, Khan Academy) to service students traditionally in career and technical education (CTE) programs.
   - Provide support to leaders in 100+ districts to utilize PSAT/AP Potential data for district use.
   - Align existing Khan Academy and edX modules to 2+ CTE clusters and corresponding CLEP exams.
     - Provide student and educator support via online and in-person workshops to move from data use to student-focused solutions to advanced credit opportunities.
   - Bring use of AP potential data to at least 1/3 of rural districts due to high PSAT penetration.

4. **PROMOTE:** Work with internal departments (e.g. A2O, SDP, GR) and external partners (e.g. CTSO advisors, rural consortia) to share solutions in small rural high schools through existing CTE and dual enrollment programs.
   - Present workshops and results at 5+ CTSO, CTE, or counselor statewide and regional conferences.
   - Include success stories in communications and A2O materials focused on telling the stories of at least three students and their communities.
   - With the support of ROCI, build case materials and target two more models to begin AY 2017-18.

5. **CONNECT:** Align pilot goals with the work of other influential actors.
   - ESSA Title I, II, IV, ConnectED, Next-Generation High Schools, Future Ready District Pledge.
   - College & Career Counseling: College Advising Corps, NCAN, Emerson Collective.
   - Real world & life-long learning: code.org, Project Lead the Way, edX.
   - Embed ROCI as a research partner in the work. ROCI tasks include:
     - Negotiating data sharing agreements.
     - Comparative study of student outcomes with varying levels of CB program interaction, dual credit, and virtual learning opportunities.

Optimal Contract Pilot: Colorado and Washington

State	2010 Census # Rural Students	2010 Census % Rural Students	# Rural Minority Students	% Small Rural Districts	2015 AP Cohort Rural Part %	# in CTSOs	# HS CLEP Takers	# of HS CTE students	Dual Enroll in HS	Statewide use of CB programs	% Title 1 Rural Students	% LI Rural Students
Colorado (T2)	122,491	14.7	37,944	70.6	34.0	27,634	XXX	92,542	Encouraged	FedAP/PN/SAT	12.2	31.2
Idaho (T2)	78,192	29.4	17,207	60.0	10.3	14,010	XXX	84,447	Encouraged	FedAP/PN/SAT	17.6	50.8

Partners operating in region	*SEA/ESA Connections*:	*CTE Funding*
○ Khan Idaho ○ Albertson Foundation, Gates Family Foundation ○ Battelle for Kids ○ Rural Opportunities Consortium of Idaho (ROCI)	○ CO: Tina Goar (CDE), Rep. Wilson, AP Rural Incentive Program ○ ID: Alone in region w/contracts, low AP conversion ○ Initial targets: CO rural collaborative, ID Khan pilots	○ CO: Career & Technical Act ○ ID: Factored by FTEs, # of classes, # of periods

Pilot Model A: Pacific Northwest

State	2010 Census # Rural Students	2010 Census % Rural Students	# Rural Minority Students	% Small Rural Districts	2015 AP Cohort Rural Part %	# in CTSOs	# HS CLEP Takers	# of HS CTE students	Dual Enroll in HS	Statewide use of CB programs	% Title 1 Rural Students	% LI Rural Students
Washington (T1)	105,104	10.1	30,464	59.0	24.2	27,363	XXX	302,888	Required	FedAP	18.4	47.7
Idaho (T2)	78,192	29.4	17,207	60.0	10.3	14,010	XXX	84,447	Encouraged	FedAP/PN/SAT	17.6	50.8

Partners operating in region	*SEA/ESA Connections*:	*CTE Funding*
○ Khan Idaho ○ Albertson Foundation ○ Rural Alliance for College Success ○ Rural Opportunities Consortium of Idaho (ROCI)	○ WA: rural collaboratives, statue requires dual credit ○ ID: Alone in region w/contracts, low AP conversion ○ Initial targets: Central/Eastern WA, North ID	○ WA: Basic allocation has CTE weight ○ ID: Factored by FTEs, # of classes, # of periods

Pilot Model B: Great Smoky Mountains

State	2010 Census # Rural Students	2010 Census % Rural Students	# Rural Minority Students	% Small Rural Districts	2015 AP Cohort Rural Part %	# in CTSOs	# HS CLEP Takers	# of HS CTE students	Dual Enroll in HS	Statewide use of CB programs	% Title 1 Rural Students	% LI Rural Students
North Carolina (T1)	712,529	49.2	289,641	0.0	27.8	57,542	XXX	510,740	Permitted	State Full AP	23.7	53.1
Tennessee (T3)	393,211	39.8	59,437	4.8	11.3	78,877	XXX	176,804	Unspecified	FedAP	22.5	53.0

Partners operating in region	*SEA/ESA Connections*	*CTE Funding*
○ Battelle for Kids ○ Ohio Appalachian Collaborative expansion	○ NC: NCAPP ○ TN: interested in statewide programs/partnerships ○ Initial targets: Western NC, Eastern TN	○ NC: $10K program support + 50 months FTE ○ TN: Based on program size

Pilot Model A: Southwest Rockies

State	2010 Census # Rural Students	2010 Census % Rural Students	# Rural Minority Students	% Small Rural Districts	2015 AP Cohort Rural Part %	# in CTSOs	# HS CLEP Takers	# of HS CTE students	Dual Enroll in HS	Statewide use of CB programs	% Title 1 Rural Students	% LI Rural Students
Colorado (T2)	122,491	14.7	37,944	70.6	34.0	27,634	XXX	92,542	Encouraged	FedAP	12.2	31.2
Nevada (T2)	16,890	3.9	3,105	66.4	38.5	10,076	XXX	52,377	Unspecified	FedAP	18.4	47.9

Partners operating in region	*SEA/ESA Connections*	*CTE Funding*
○ Battelle for Kids ○ Colorado Education Initiative ○ Gates Family Foundation	○ CO: Tina Goar (CDE), Rep. Wilson, AP Rural Incentive Program ○ NV: state funding to rural districts ○ Initial targets: NV non-urbans, CO rural collaborative	○ CO: Career & Technical Act ○ NV: No base allocation